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MARSHALL'S BULBS

W. E. MARSHALL & CO.

166 WEST 23rd ST., NEW YORK

W. E. MARSHALL

1913

A. E. WHEELER

MARSHALL'S COLLECTION OF CHOICE BULBS

INDOOR COLLECTION OF BULBS

50 Bulbs for 50 Cents for Pots and Winter Flowering

- | | | |
|-------------------------|--------------------------|----------------------------|
| 12 Jonquils, Campenelle | 12 Freesia refracta alba | 3 Narcissus, Paper White |
| 3 Hyacinths, 3 colors | 4 Tulips, Single Scarlet | 3 Narcissus, Trumpet Major |
| 3 White Roman Hyacinths | 4 Tulips, Double White | 6 Oxalis, Buttercup |

If ordered by mail, add 20 Cents extra for postage

HARDY COLLECTION OF BULBS

50 Bulbs for 50 Cents for Outside Planting.

- | | | |
|--------------------|------------------------|----------------------------|
| 2 Hyacinths, Red | 10 Snowdrops | 6 Narcissus, Single |
| 2 Hyacinths, White | 6 Tulips, Single Mixed | 6 Narcissus, Double |
| 2 Hyacinths, Blue | 6 Tulips, Double Mixed | 10 Crocusses, Mixed Colors |

If ordered by mail, add 20 Cents extra for postage

COLLECTION OF BULBS FOR HOUSE CULTURE

Price, 2.50

- | | |
|------------------------------|-------------------------------|
| 6 White Roman Hyacinths | 6 Trumpet Narcissus, Princeps |
| 6 Fine Named Dutch Hyacinths | 6 Double Narcissus, Von Sion |
| 6 Fine Mixed Dutch Hyacinths | 6 Poet's Narcissus |
| 12 Fine Mixed Single Tulips | 12 Mixed Spanish Iris |
| 12 Fine Mixed Double Tulips | 6 Campenelle Jonquils |
| 30 Mixed Crocus | 6 Scilla Sibirica |
| 6 Polyanthus Narcissus | 6 Freesia refracta alba |

COLLECTION OF HARDY BULBS FOR OUTDOOR CULTURE

Price, \$2.00

- | | |
|--------------------------------|----------------------------|
| 6 Mixed Single Red Hyacinths | 6 Scilla Sibirica |
| 6 Mixed Single Blue Hyacinths | 12 Spanish Iris |
| 6 Mixed Single White Hyacinths | 6 Double White Narcissus |
| 24 Mixed Early Tulips | 6 Butter-and-Egg Narcissus |
| 50 Mixed Crocus | 6 Snowdrops |

LOCATION OF OUR STORE.

Our store, No. 166 West 23rd Street, is situated between Sixth and Seventh Avenues, near Seventh Ave.

Out of town customers can reach us by the Penn. or Long Island R. R. from the 33rd Street station by the Seventh Ave. surface car to 23rd Street. By the Erie, D. L. & W. or Penn. R. R. by the Hudson Tunnels to 23rd Street and Sixth Avenue.

W. E. MARSHALL & CO.

TELEPHONE
3288 CHELSEA

166 West 23rd Street, NEW YORK

Marshall's Matchless Bulbs

To succeed with bulbs it is necessary to begin right, by getting sound bulbs of good size, and we would warn intending purchasers against buying cheap, undersized bulbs and expect the fine results obtained from such as we offer. Our sources of supply are the best in the country and abroad.

Hyacinths

POT CULTURE.—Planting may be made at any time from September to December, though October is the best time. A light, rich soil, with a mixture of well-rotted cow or sheep manure, is most suitable. Use a 4- or 5-inch pot, and have the top of the bulb just above the surface. After potting, give a good watering and set away in a cool cellar or outhouse, and cover over with coal-ashes or some litter until thoroughly rooted; they may then be brought as wanted for a succession of flowers into a moderately warm, light room.

CULTURE IN GLASSES.—When it is desired to grow Hyacinths in water, they should be placed so that the base of the bulb merely touches the water. The glasses should then be set in a cool, dark closet, or in the cellar, until filled with roots, when they may be brought into the light. Give as much fresh air as possible without letting the plants stand in a draught, and as nearly as possible at a temperature of 60° until the spikes are developed. To put them at once into a room with a temperature of, say 70°, would cause them to flower prematurely.

Marshall's Exhibition Hyacinths

The varieties enumerated below have been selected for their distinct coloring and free-flowering qualities, and are all selected top-root bulbs, specially suited for growing in pots or glasses or for high-grade bedding.

Single White and Blush.

Baroness van Thuyll. Pure white; very broad truss.
Grand Blanche. Blush-white; loose and graceful flower.

La Franchise. Bells, large and waxy white.

La Grandesse. Pure white; very large spikes and bells.

L'Innocence. A pure white, handsome flower. One of the best.

Single Blue, Purple and Violet.

Czar Peter. Light azure blue; large spike and bells.

Enchantress. Delicate porcelain-blue.

Grand Maitre. Dark porcelain-blue; extra large truss.

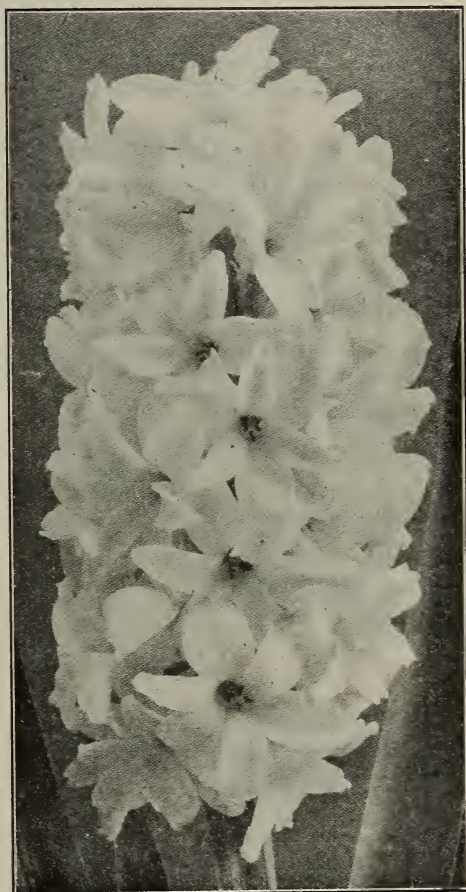
King of the Blues. Deep purplish blue; fine close spike.

Mansfield. Ruby violet, splendid truss.

Marie. Rich, dark blue; very fine spike.

Potgeiter. Extra fine, light blue; large bells.

Queen of the Blues. Beautiful azure-blue; large bells; handsome truss.



Exhibition Hyacinth.

Single Red, Rose and Pink.

Garibaldi. Brilliant crimson; large truss; early.

Gen. Pelissier. Deep purplish crimson; early.

Gertrude. Bright, rosy red; large compact spike; very popular.

Gigantea. Delicate shade of blush-pink; large truss.

Moreno. Lovely blush-pink; large truss.

Norma. Fine waxy pink; early; very distinct.

Robert Steiger. Deep crimson; compact spike.

Roi des Belges. Dark scarlet; very fine flower.

Rosea Maxima. Delicate pink.

Single Yellow.

Day Light. Orange-yellow.

MacMahon. Pure yellow.

All Named Hyacinths on this page 15c. each, \$1.50 per dozen, \$12.00 per 100.

MARSHALL'S

Select Second Size Named Hyacinths

These are smaller than our Exhibition Bulbs offered on page 1, but are fine flowering stock, and admirably adapted for pot culture and high-grade bedding where distinct shades of color are desired. We can furnish them in the following grand varieties:

Gertrude. Deep rose; extra fine for bedding, having erect truss.

La Peyrouse. Light porcelain-blue.

L'Innocence. Purest white; a grand variety.

Marie. Rich purple-blue; enormous spike.

Roi des Belges. Brilliant crimson-scarlet.

Price, any of the above 10 cts. each; \$1.00 per doz.; \$7.00 per 100.

Hyacinths Bedding and Forcing.

These bulbs have been specially selected in Holland for us and are equally suited for either bedding or forcing. They will all throw large uniform spikes of flowers, and cannot fail to give universal satisfaction.

OUTDOOR CULTURE—The bulbs may be planted any time from October to December—the earlier the better. They succeed in any good, well-drained garden soil. Set the bulbs so that the tops will be 3 or 4 inches below the surface and 6 to 10 inches apart. Before very severe weather comes on, cover the beds with straw, leaves or manure, to protect them from the frost, but care should be taken that this covering is not too thick; as the bulbs are as likely to be injured by being kept too warm as by freezing; this should be removed in March, or when danger from hard frost is past.

Single Varieties.

| | Each | Doz. | 100 |
|--------------------------------|--------|--------|--------|
| Mixed Rose and Pink..... | \$0.05 | \$0.50 | \$3.50 |
| Mixed Red Shades | .05 | .50 | 3.50 |
| Pure White | .05 | .50 | 3.50 |
| Mixed White Shades | .05 | .50 | 3.50 |
| Mixed Blue, Light Shades | .05 | .50 | 3.50 |
| Mixed Blue, Dark Shades..... | .05 | .50 | 3.50 |
| Mixed Yellow | .05 | .50 | 3.50 |
| Mixed All Colors | .05 | .50 | 3.50 |

Double Varieties.

| | Each | Doz. | 100 |
|--------------------------------|--------|--------|--------|
| Mixed Rose and Pink..... | \$0.05 | \$0.50 | \$4.00 |
| Mixed Red Shades | .05 | .50 | 4.00 |
| Pure White | .05 | .50 | 4.00 |
| Mixed White Shades | .05 | .50 | 4.00 |
| Mixed Blue, Light Shades | .05 | .50 | 4.00 |
| Mixed Blue, Dark Shades | .05 | .50 | 4.00 |
| Mixed Yellow | .05 | .50 | 4.00 |
| Mixed All Colors | .05 | .50 | 4.00 |

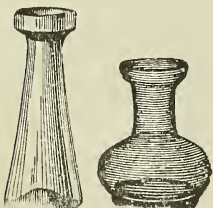
Italian Hyacinths.

The flowers are single, very graceful and fragrant, and produce abundantly.

| | Each | Doz. | 100 |
|---------------------------|--------|--------|--------|
| Single White Italian..... | \$0.05 | \$0.50 | \$3.50 |



Single Hyacinth.



Tall Shape.

Tye Shape.

Hyacinth Glasses

Hyacinths can easily be grown in water, and it is rather a novelty to grow them in this way.

We offer the following two kinds of glasses to be used for this purpose.

Tall Shape. In various colors. 18c. each; \$1.80 per dozen.

Tye Shape. In various colors. 20c. each; \$2.00 per dozen.

Marshall's French Roman Hyacinths

(Ready for Delivery in August.)

The flowers are delightfully fragrant, and each bulb will throw up three to four spikes. For forcing, three or four bulbs are generally planted in a pot. The pots must be kept in a cool and dark place until they fill with roots, when the flower-spikes can be rapidly developed by exposure to light and moderate heat. They are very easily grown and extremely early; and, by making successive plantings, they may be had in flower all through the Winter.

| | Each | Doz. | 100 | 1000 |
|--|--------|--------|--------|---------|
| White Roman. Mammoth bulbs; 14 centimeter up..... | \$0.10 | \$1.00 | \$6.00 | \$55.00 |
| White Roman. Extra selected, large size bulbs; 13 to 15 centimeters... | .08 | .75 | 5.00 | 45.00 |
| White Roman. Selected bulbs; 12 to 15 centimeters | .05 | .60 | 4.50 | 40.00 |
| Single Blue Roman. First size..... | .05 | .50 | 3.50 | 30.00 |
| Dark Pink Roman | .05 | .50 | 3.00 | 27.00 |
| Light Pink Roman | .05 | .50 | 3.00 | 27.00 |

We furnish 6 bulbs at the dozen rate; 25 at the 100 rate; 250 at the 1,000 rate.

Tulips.

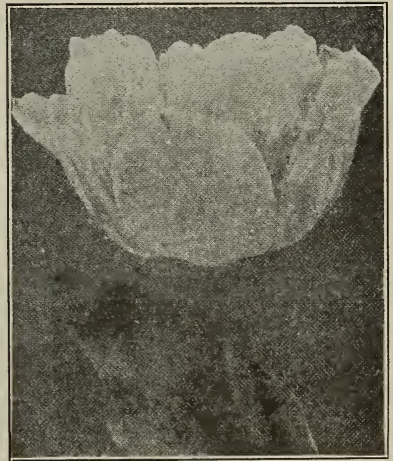
Tulips for bedding are the most popular and effective of all hardy bulbous plants. In our descriptions we give the color and average height to which they grow. For pot culture and forcing for Winter cut flowers, they are invaluable.

The cultural directions given for Hyacinths on page 1 are equally applicable to Tulips, except that the bulbs, being smaller, must not be planted quite so deep. Four inches to the bottom of the bulb is deep enough, and a distance of 5 to 6 inches between the bulbs is sufficient. They may be planted in October and November, before the ground freezes. For pot culture, a compost of two parts loam to one part light manure, with some sand intermixed, is suitable. From three to five bulbs, according to size, in a 5-inch pot, are very effective. The pots should be buried until the bulbs are well rooted in the manner recommended for Hyacinths.

Marshall's Selected Double Tulips

While not equal to the single in brilliancy, double varieties last much longer in bloom. The early varieties, such as Murillo, Imperator, Rubrorum, and the Tournesols, are excellent for forcing. The latter sorts will not bear forcing, but are very effective in beds or borders.

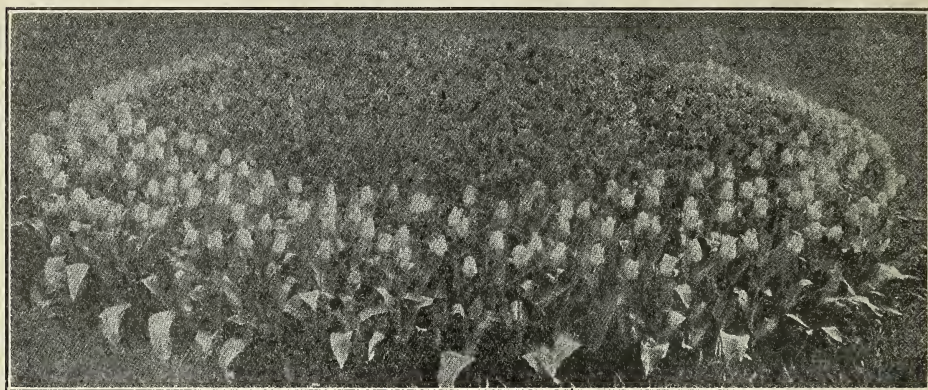
| | Doz. | 100 | 1000 |
|--|--------|--------|---------|
| Couronne d'Or. Beautiful orange-yellow; large handsome flower. A, 8 | \$0.40 | \$3.00 | \$28.00 |
| Gloria Solis. Deep crimson, with yellow edge. B, 7..... | .30 | 2.00 | 15.00 |
| Imperator Rubrorum. Bright scarlet; very double. B, 8..... | .40 | 3.00 | 26.00 |
| La Candeur. Pure white; very large; excellent bedding sort. B, 8.... | .25 | 1.75 | 15.00 |
| Lucretia. Deep pink, very large flowers | .45 | 3.50 | 30.00 |
| Murillo. Blush-white, shaded with rose; large. B, 7..... | .25 | 1.75 | 14.00 |
| Rex Rubrorum. Brilliant scarlet; fine for bedding with La Candeur. B, 8..... | .30 | 2.25 | 20.00 |
| Salvator rosa. Splendid deep rose, flamed white | .35 | 2.50 | 22.50 |
| Schoonoord. The best double white Tulip | .80 | 5.50 | 50.00 |
| Tearose. Soft saffron yellow..... | 1.00 | 6.00 | 55.00 |
| Toreador. Very large red with rich orange yellow border. B, 7.... | .80 | 5.50 | 50.00 |
| Tournesol. Bright scarlet, edged with yellow. B, 8..... | .50 | 3.25 | 30.00 |
| Tournesol, Yellow. Yellow, shaded with orange. B, 8..... | .35 | 2.50 | 22.00 |
| Turban Violet. Light violet..... | .40 | 3.00 | 27.50 |
| Superfine Mixed. All colors, 2 for 5 cts. | .20 | 1.25 | 10.00 |



Double Tulip.

If Tulips are ordered by mail, add 5c per dozen.

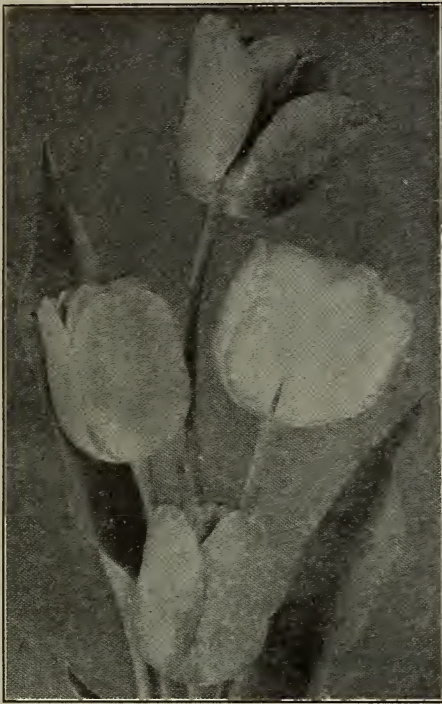
Marshall's Single Early Tulips



Bed of Marshall's Single Early Tulips.

A, B and C indicate season of flowering. A and B may be planted to flower about the same time in the open ground; C flowers later. The figures indicate average height in inches.

| | Each | Doz. | 100 | 1000 |
|--|--------|--------|--------|---------|
| Artus. Bright scarlet; fine bedder. B, 7..... | \$0.03 | \$0.25 | \$1.50 | \$12.00 |
| Belle Alliance. Brilliant, deep scarlet. A, 8..... | .05 | .30 | 2.25 | 20.00 |
| Canary Bird. Rich golden yellow; fine for forcing. A, 8..... | .03 | .25 | 1.50 | 12.00 |
| Cardinal Rampollo. Clear yellow, bordered orange red, good forcer or bedder. B, 7..... | .05 | .40 | 3.00 | 27.50 |
| Chrysolora. Pure yellow; large flower; splendid bedder. A, 8..... | .03 | .25 | 1.50 | 12.00 |
| Cottage Boy. Bronze yellow, with orange, very showy bedder; a sport from Cottage Maid. B, 8..... | .05 | .30 | 2.00 | 18.00 |
| Cottage Maid. Rose, shaded with white. B, 8..... | .03 | .25 | 1.50 | 12.00 |
| Couleur Cardinal. Rich crimson; large and beautiful. C, 7..... | .05 | .35 | 2.75 | 25.00 |
| Crimson Brilliant. Scarlet-crimson; an early forcer. C, 8..... | .05 | .30 | 2.00 | 17.50 |
| Duchesse de Parma. Orange-red, margined with yellow. B, 8..... | .03 | .25 | 1.50 | 12.00 |
| Flamingo. A beautiful large cup-formed flower—a sport from White Hawk. B, 9..... | .10 | .80 | 6.00 | 50.00 |
| Fred Moore. Dark orange, long stems; early forcer..... | .03 | .30 | 1.75 | 15.00 |
| Joost van Vondel. Cherry-red and white. B, 8..... | .05 | .35 | 2.50 | 22.00 |
| Joost van Vondel. Pure white. B, 8..... | .05 | .50 | 4.00 | 35.00 |
| Keizerkroon. Crimson-scarlet, bordered with clear yellow. B, 9..... | .05 | .25 | 1.75 | 16.00 |
| Lady Boreel. The largest white. B, 8..... | .05 | .50 | 4.00 | 35.00 |
| La Reine. White, lightly shaded with rose. A, 7..... | .03 | .20 | 1.25 | 10.00 |
| Le Matelas. The earliest pink variety. Splendid bright pink edged with blush. B, 9..... | .05 | .60 | 4.00 | 35.00 |
| Mon Tresor. Large; pure yellow; early forcer. B, 8..... | .05 | .25 | 1.75 | 16.00 |
| Pink Beauty. Rosy pink, slightly shaded white. Fine for bedding. B, 10..... | .10 | .75 | 5.50 | 50.00 |
| Pottebakker, Scarlet. Bright scarlet; large. B, 8..... | .05 | .30 | 2.00 | 18.00 |
| Pottebakker, White. Pure white; large and showy. A, 8..... | .05 | .30 | 2.00 | 18.00 |
| Pottebakker, Yellow. Fine, pure yellow variety. A, 8..... | .03 | .25 | 1.75 | 15.00 |
| President Lincoln. (Queen of the Violets.) Clear violet..... | .05 | .50 | 3.50 | 30.00 |
| Prince of Austria. Brilliant orange-red. Grand forcer..... | .05 | .35 | 2.50 | 22.00 |
| Princess Helena. Pure white, fine for bedding. A, 8..... | .05 | .30 | 2.00 | 18.00 |
| Primrose Queen. Soft primrose, very effective variety. 10..... | .05 | .35 | 2.75 | 26.00 |
| Proserpine. Salmon rose-pink; very fine form; good forcer. B, 8..... | .05 | .45 | 3.25 | 30.00 |
| Queen of the Netherlands. Delicate rosy blush pink. B, 13..... | .05 | .35 | 2.50 | 22.00 |
| Rosamundi Huikman. Rose and white. B, 8..... | .03 | .25 | 1.50 | 12.00 |
| Rose Grisdelin. Dark rose and white. C, 7..... | .03 | .25 | 1.50 | 12.00 |
| Rose Luisante. Deep rose; beautiful, large flower. C, 8..... | .05 | .45 | 3.25 | 30.00 |
| Vermilion Brilliant. Vermilion-scarlet; forcing or bedding. B, 7..... | .05 | .40 | 2.75 | 26.00 |
| White Hawk. Large; pure white; fine for forcing. A, 7..... | .05 | .35 | 2.25 | 20.00 |
| Wouwerman. Rich claret-purple; distinct color..... | .10 | .70 | 5.00 | 45.00 |
| Yellow Prince. Bright yellow; sweet-scented. B, 8..... | .03 | .25 | 1.50 | 12.00 |
| Marshall's Superfine Mixture. Brightest colors; many varieties..... | .02 | .20 | 1.25 | 10.00 |



Darwin Tulips.

Duc Van Thol Tulips

The Duc van Thols are the earliest of all the Tulips. They are of dwarf habit, and well adapted for forcing and for pot culture. They bloom outdoors before the early single Tulips.

| | Doz. | 100 |
|---------------------------------------|--------|--------|
| Red. Bordered with yellow..... | \$0.25 | \$1.50 |
| Scarlet. Reddish scarlet..... | .30 | 2.00 |
| Rose | .25 | 1.75 |
| Yellow. Citron-yellow | .30 | 2.00 |
| White. Clear satiny white..... | .25 | 1.50 |

Marshall's Special

(May-Flowering).

Darwin Tulips

The finest class of late flowering Tulips in existence. Flowers are brilliant, self-colored, borne on strong stems, many of them 2 feet high. The colors surpass in brilliancy anything hitherto known in Tulips, and are of almost every conceivable color.

They force readily and we can recommend them for that purpose; indeed, there is no finer group of Tulips for conservatory decoration at their season than these Darwins. They embrace nearly all shades of white, lilac, rose, red and crimson, while a few new and very interesting types are colored mauve, heliotrope, maroon and black-purple.

| | Doz. | 100 | 1000 |
|---|--------|--------|---------|
| Baronne de la Tonnaye. Vivid pink, tall, strong stems..... | \$0.50 | \$3.50 | \$30.00 |
| Clara Butt. Globular flower, salmon-colored, with basal coloring of rose and external flushing of pink..... | .40 | 2.00 | 28.00 |
| Dream. Soft delicate lilac; large flower..... | .55 | 4.00 | 35.00 |
| Europe. Very brilliant rosy-red, with showy white centre..... | .50 | 3.50 | 32.00 |
| Francombe Sanders. Brilliant dark rosy red, with a clear white center..... | .75 | 5.50 | 50.00 |
| Gretchen (Margaret). Delicate flesh color, cup-shaped flower..... | .25 | 1.75 | 16.00 |
| Glow. Vermillion, with blue center..... | .50 | 3.50 | 30.00 |
| Harry Veitch. Brilliant brownish red, on long stems..... | .35 | 2.50 | 23.00 |
| Mad. Krelage. A grand and chastely colored tulip; soft rosy pink, with paler margins; very tall and shapely..... | .50 | 3.50 | 30.00 |
| Mrs. Stanley. Large purplish rose, with bright blue center..... | .60 | 4.00 | 35.00 |
| Nauticas. Purplish-rose, with violet base, shaded bronze; very large flower on a tall stem..... | .40 | 2.75 | 26.00 |
| Pride of Haarlem. Brilliant rosy-carmine. Very large flowers..... | .50 | 3.50 | 32.00 |
| Psyche. Very soft salmon-rose. A beautiful variety..... | 1.00 | 7.50 | 70.00 |
| Rev. Ewbank. Vivid heliotrope-lilac | .75 | 5.00 | 45.00 |
| Philippe de Communes. Velvety dark violet. The best dark variety..... | .50 | 3.50 | 30.00 |
| The Sultan (Joseph Israels). Velvety black..... | .25 | 1.75 | 16.00 |
| William Pitt. Carmine, very showy variety..... | .50 | 3.50 | 30.00 |
| White Queen. (La Candeur). The best white..... | .60 | 4.00 | 35.00 |
| Marshall's Finest Mixed Darwins. All colors and shades. 3 for 10c..... | .30 | 2.00 | 18.00 |

Collections of Darwin Tulips

We offer the following trial collections of Darwins to enable our customers to become acquainted with these Giant May Flowering Tulips.

3 each of 12 varieties, 36 bulbs, \$1.50. 6 each of 12 varieties, 72 bulbs, \$2.50.



Parrot Tulip.

These flower in May; usually they are in full bloom about Memorial Day. They are very showy and contain colors not found in any other class of Tulips. They are valuable for cut flower use, both to the amateur and florist. They are also in demand for bedding and for planting in clumps in borders of hardy perennials.

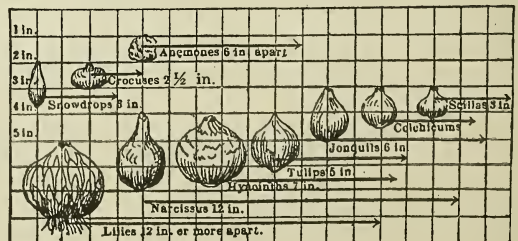
| | Doz. | 100 | 1000 |
|---|--------|--------|---------|
| Admiral of Constantinople. Glossy scarlet, shaded and tipped orange..... | \$0.25 | \$1 75 | \$14.00 |
| Feu Brilliant (Cramoisie Brilliant). Dazzling crimson | .25 | 1 75 | 14.00 |
| Lutea Major. Yellow, striped crimson and green..... | .25 | 1 75 | 14.00 |
| Markgraaf. Golden inside; feathered brilliant scarlet purple and green outside | .30 | 2.00 | 17.00 |
| Perfecta. Yellow, scarlet, green..... | .25 | 1.75 | 14.00 |
| Finest Mixed. A combination of all sorts | .25 | 1.50 | 14.00 |
| Bybloems. White grounds, striped or marked with purple, lilac or black.... | \$0.25 | \$1.75 | \$15.00 |
| Bouton d'Or (Ida). The only late pure deep yellow; very beautiful; fine for cutting | .30 | 2.00 | 18.00 |
| Fairy Queen. Rosy heliotrope, with a broad yellow margin | .30 | 2.25 | 20.00 |
| Gesneriana Spathulata. Dazzling scarlet, black center; effective in beds; fine for cutting | .30 | 2.00 | 18.00 |
| Gesneriana Lutea. An immense globe-shaped rich yellow tulip, of unusually fine outline | .30 | 2.00 | 18.00 |
| Golden Crown. Deep yellow, edged red; fine for cutting | .25 | 1.50 | 13.00 |
| Golden Eagle. Deep yellow, with narrow, orange-red fringe | .25 | 1.50 | 13.00 |
| Isabella (Blushing Bride). Rose and white; fine late sort | .25 | 1.50 | 13.00 |
| La Merveille. Orange-scarlet, flushed rose with yellow base..... | .25 | 1.75 | 15.00 |
| Orange Beauty. Brilliant orange red, flushed with gold; enormous flower..... | .30 | 2.00 | 18.00 |
| Parisian White. White changing to rose..... | .30 | 2.00 | 18.00 |
| Picotee (Maiden's Blush). White, margined rose..... | .25 | 1.75 | 15.00 |
| Salmon Queen. Salmon-red flower of great substance, center green..... | .35 | 2.50 | 23.50 |
| The Fawn. Delicate light greyish-rose, changing to rosy-white | .60 | 4.00 | 35.00 |

PLANTING TABLE FOR BEDS OF BULBS.

A circular bed 6 ft. in diameter with bulbs 6 inches apart, requires 110 bulbs; 5 inches apart requires 160 bulbs; 4 inches apart requires 300 bulbs.

DEPTH AT WHICH BULBS SHOULD BE PLANTED.

Many of our customers are frequently puzzled to know the proper depth and distance apart at which bulbs should be planted. The accompanying diagram, reproduced from **Popular Gardening**, conveys the information much more clearly and briefly than we could describe it. The chart will bear careful study. **Outdoor planting** should be done early in the fall to secure healthy plants, vigorous foliage and beautiful flowers.



Narcissus

The very beautiful species and varieties of Narcissus are among the most popular and largely grown of spring-flowering bulbs, and that deservedly, too. Their exquisite grace, beauty and charm of habit have been immortalized in the poetry of all times. No garden should be without them.

They are all of the easiest cultivation, thriving in almost any soil and situation, and they may be left alone for several years after once being planted. They do best, however, in a deep and somewhat stiff soil, and in a partially shaded position. They are well adapted for planting by the sides of streams, or lakes, or ponds, and in mixed flower or shrubbery borders. They are also suitable for naturalizing in the grass, by the side of woodland walks or in open spaces between trees and shrubs. With the exception of the Polyanthus section, they are all perfectly hardy.

Narcissus are also very suitable for growing in pots, requiring about the same treatment as hyacinths, with 3 or 4 bulbs in a 5-inch pot. Some of the varieties are grown in large numbers by florists for winter cut-flowers.



Narcissus, Single Trumpet Major.

Single Narcissus, or Daffodils

| | Each | Doz. | 100 | 1000 |
|--|--------|--------|--------|---------|
| Barrii Conspicuus. Sulphur perianth, broad cup marked with scarlet... | \$0.05 | \$0.25 | \$1.50 | \$12.00 |
| Bicolor Empress. White perianth, yellow trumpet. An excellent forcer. | | | | |
| Double nose bulbs | .05 | .40 | 3.00 | 28.00 |
| Bicolor Victoria. Creamy white perianth, yellow trumpet. Double nose bulbs | .05 | .40 | 3.00 | 28.00 |
| Emperor. Flowers of great size and substance; yellow trumpet. Double nose bulbs | .05 | .40 | 3.00 | 28.00 |
| Elvira. (Poetaz). Pure white with yellow eye; splendid keeper..... | | .40 | 3.00 | 28.00 |
| Glory of Leyden. Immense trumpet and perianth deep yellow..... | .20 | 2.00 | 14.00 | |
| Golden Spur. One of the grandest Daffodils; extra large, rich yellow flowers. Early, free-flowering. | | | | |
| Selected first size bulbs..... | .05 | .30 | 2.75 | 25.00 |
| Double Nose bulbs..... | .05 | .50 | 3.75 | 35.00 |
| Incomparabilis, Cynosure. Bright orange cup, white perianth..... | .03 | .20 | 1.25 | 10.00 |
| Incomparabilis, Sir Watkin. Golden crown, with primrose perianth, Double nosed bulbs | .05 | .35 | 3.00 | 28.00 |
| King Edward VII. The very largest form of Poet's, an exquisite flower of elegance | .10 | .50 | 4.00 | 37.50 |
| Leedsii. Pure white, star-shaped, sweet-scented..... | .03 | .20 | 1.25 | 10.00 |
| Stella. White, star-shaped flowers bright yellow cups..... | .03 | .20 | 1.25 | 10.00 |
| Poeticus (Pheasant's Eye). Pure white, with red cup; very fragrant; fine for cutting | .03 | .20 | 1.00 | 8.00 |
| Poeticus Ornatus. Same color as Poeticus but the flowers are larger... | .03 | .20 | 1.25 | 10.00 |
| Princeps. Sulphur-yellow perianth and deep yellow trumpet..... | .05 | .25 | 1.50 | 12.00 |
| Trumpet Major (Von Sion). French grown. First size bulbs; very early for forcing or outside planting..... | .05 | .30 | 2.25 | 22.00 |
| Mixed Single. All sorts..... | .05 | .25 | 1.50 | 12.00 |

If ordered by mail, add 5c. per dozen for postage.

Jonquils

A class related to the Narcissus, and suitable alike for pot culture or planting out. The culture required is the same as for Hyacinths.

| | Doz. | 100 | 1000 |
|---|--------|--------|--------|
| Large Single Campernelle. Yellow, large flowers..... | \$0.20 | \$1.00 | \$9.00 |
| Odorus Regulosus. Deep golden yellow; very fragrant; best for outside..... | .20 | 1.00 | 9.00 |
| Single Sweet-scented. Rich, yellow, fragrant..... | .15 | .80 | 7.00 |
| Double, Sweet-scented. Rich yellow fine..... | .30 | 2.25 | 20.00 |

Double Narcissus, or Daffodils

Albus plenus odoratus. Snow-white, gardenia-flowered Daffodil. Each 3c.; doz. 25c.; 100 \$1.50; 1000 \$12.00.

Incomparabilis (Butter-and-Eggs). Rich lemon-yellow. Each 3c.; doz. 30c.; 100 \$1.75; 1000 \$15.00.

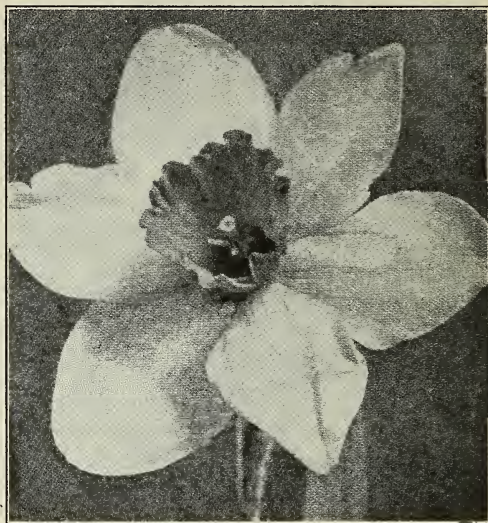
Orange Phoenix (Eggs-and-Bacon). White, with orange center; excellent for pot culture. Each 5c.; doz. 30c.; 100 \$2.00; 1000 \$15.00.

Sulphur Phoenix (Codlins and Cream). Large pure white flowers. The largest and finest of the double varieties. Each 5c.; doz. 35c.; 100 \$2.50; 1000 \$20.00.

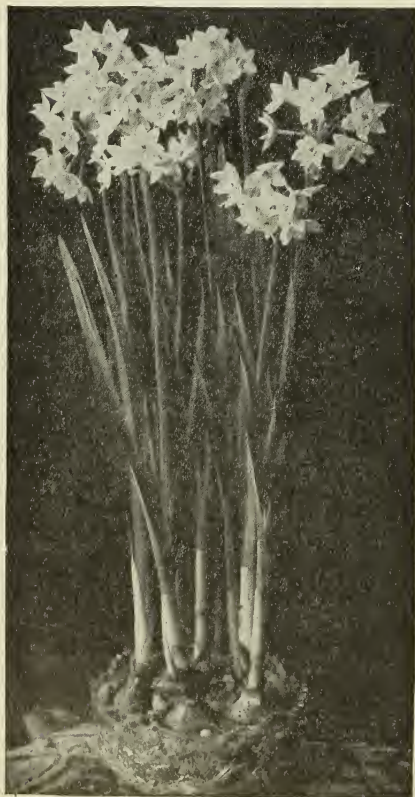
Von Sion (the "Old-fashioned Double Daffodils"). Flowers deep golden yellow; very decorative; excellent for cutting, and most extensively used by florists for cut-flowers. Perfectly hardy and the right thing for the garden.

Single-Nosed Bulbs. Extra large size. Each 5c.; doz. 35c.; 100 \$2.50; 1000 \$24.00.

Double-Nosed Bulbs. Mammoth size. Each 5c.; doz. 50c.; 100 \$3.75; 1000 \$35.00.



Narcissus, Sir Watkin.



Narcissus, Paper White Grandiflora.

Polyanthus Narcissus

Beautiful, free-flowering, deliciously sweet-scented flowers, of the easiest culture; suitable for forcing or for growing in water in the same way as the Chinese Sacred Narcissus. They bear tall spikes of bloom, with from six to twenty flowers each. Bulbs planted in the open border in October and November stand the Winter with protection.

Grand Monarque. White, with pale yellow cup; very large flower. Each 5c.; doz. 40c.; 100 \$3.00; 1000 \$25.00.

Grand Soleil d'Or. Yellow, with orange cup; very free-flowering. Each 5c.; doz. 40c.; 100 \$3.00; 1000 \$25.00.

Paper White Grandiflora. The best Narcissus for growing in water. The flowers are large, attractive in color, and intensely fragrant. Place them in a shallow dish of water, with gravel or small stones at the bottom. Fine for pot culture, and largely grown by florists for cut flowers.

Large bulbs. Doz. 30c.; 100 \$2.00; 1000 \$16.00.

Mammoth bulbs. Doz. 40c.; 100 \$2.25; 1000 \$20.00.

Pebbles for above. Qt., 10c.; 4 qts. 35c.

Mixed Polyanthus Narcissus. Each 5c.; doz. 40c.; 100 \$2.50; 1000 \$20.00.

If Polyanthus Narcissus are ordered by mail, add 10c. per dozen for postage.

Chinese Sacred Narcissus

(Joss Flower, or Flower of the Gods)

These may be grown in pots of earth, and very satisfactorily in bowls, partially filled with pebbles and water. As the roots develop, they form a network about the pebbles, thus supporting the plant when in bloom. They should be started in the dark for ten to fourteen days, and then grown in bright light, but carefully protected from draughts. The flowers are mostly white, with yellow cups and are very fragrant.

Extra large selected bulbs, each 10c.; 3 for 25c.; dozen \$1.00.

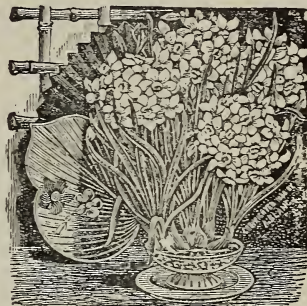
If ordered by mail, add 5c. per bulb for postage.

One bulb, Glass Bowl and Pebbles complete, 25c.

Three Bulbs, Glass Bowl and Pebbles, 40c.

Japanese Bowls, each 25c., 35c. and 45c. Set 3 for \$1.00.

Pebbles for filling Lily bowls, 10c. per quart.



ACHIMENES.

Profuse blooming tender perennials for greenhouse or conservatory decoration during summer. The colors comprise white, shades of lilac, mauve and red. Delivery in December. Five named varieties. Each 10c.; doz. \$1.00; 100 \$6.00.

ALLIUM NEAPOLITANUM.

Fine for pot culture or garden decorations. They are of the easiest culture. Pure white, with green stamens. borne in large, loose umbels; height 15 to 18 inches. 5 for 10c.; dozen 20c.; 100 \$1.00; 1000 \$7.50

AMARYLLIS.

(Ready in October)

A magnificent and interesting plant for pot culture, producing showy flowers that are very attractive and handsome. They should be grown in rich, sandy loam, with good drainage, and their abundant moisture when growing, but at their season of rest water should be given sparingly.

Belladonna Major. Large violet and white. Each 25c.; dozen \$2.50.

Formosissima (Jacobean Lily). Brilliant scarlet. Each 15c.; dozen \$1.50.

Halli. (*Lycoris squamigera*.) Bright rosy lilac flowers, fragrant, 3 or 4 inches across, flowers in August. The foliage appears in spring, disappears in June, and is followed two months later by the naked flowers. Each 20c.; doz. \$2.00.

Johnsonii (Spice Lily). Crimson, striped with white. Each 35c.; dozen \$3.50.

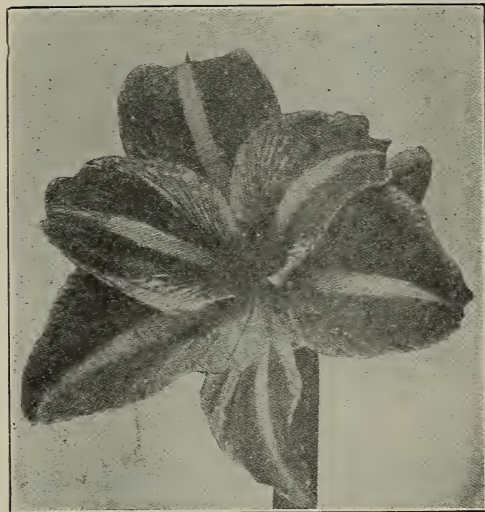
Longifolia rosea. Rose. Hardy. Each 25c.; dozen \$2.50.

Longifolia alba. White. Hardy. Each 25c.; dozen \$2.50.

Vittata. Hybrids mixed. Each 50c.; doz. \$5.00.

Hippeastrum, Veitch's and Ker's New Hybrids. The finest race of Amaryllis in cultivation; exceeding in the size and fine form of their flowers, as well as in the diversity of colors and markings, all former hybrids. The segments are of nearly uniform size, giving the flowers a regular trumpet form.

Collection of 12 named varieties, largest bulbs, one of each for \$15.00.



Amaryllis, Vittata.

AGAPANTHUS. (African Lily.)

Handsome summer and autumn flowering plants, throwing up large umbels of twenty to thirty blossoms. They should be grown in pots or tubs, in soils similar to that suggested for hyacinths.

Umbellatus. Fine blue. Each, 20c.; per doz., \$2.00; 100, \$12.00.

Anemones

These are perfectly hardy roots, producing flowers of various hues and much beauty.

| | Doz. | 100 | | Doz. | 100 |
|---------------------------------|--------|--------|----------------------------|--------|--------|
| The Bride. Pure white..... | \$0.30 | \$1.50 | Whirlwind. Pure white..... | \$2.00 | |
| Fulgens. Brilliant crimson..... | .50 | 3.00 | Choice Mixed, Single..... | .20 | \$1.00 |
| Japanica alba and rosea..... | 2.00 | | Choice Mixed, Double..... | .30 | 1.50 |

BEGONIAS TUBEROUS-ROOTED.

Splendid pot plants for the house or greenhouse and especially valuable for bedding, flowering in the greatest profusion throughout the summer. For bedding they should be started in hotbed in March and April.

| | Each | Doz. | 100 | | Each | Doz. | 100 |
|----------------------|--------|--------|--------|--------------------|--------|--------|---------|
| Single Crimson | \$0.10 | \$0.75 | \$5.00 | Double White | \$0.15 | \$1.50 | \$10.00 |
| " Salmon Pink | .10 | .75 | 5.00 | " Yellow | .15 | 1.50 | 10.00 |
| " Scarlet | .10 | .75 | 5.00 | " Rose | .15 | 1.50 | 10.00 |
| " Rose | .10 | .75 | 5.00 | " Scarlet | .15 | 1.50 | 10.00 |
| " White | .10 | .75 | 5.00 | " Salmon | ... | ... | 10.00 |
| " Yellow | .10 | .75 | 5.00 | " Mixed | .10 | 1.00 | 8.00 |
| " Mixed | .05 | .50 | 4.00 | | | | |

Lafayette. Beautiful rich crimson-scarlet. This variety is of robust habit and brilliant in the extreme. Each 25c.; dozen \$2.50; 100 \$15.00.

CALLA LILIES.



Calla Lily, White.

Well known plant, of easy culture; the only particular attention it requires is constant watering, and as warm a room as can be conveniently given it.

Devoniensis. The New Godfrey Calla. This is the finest variety ever sent out. It gives three blooms to one of the ordinary Calla, is snow white and perfect in form; blooms on very small plants, though it attains a very large size. Each 30c.; dozen \$3.00; 100 \$20.00.

Black. The plant produces a large, dark purple flower and green underneath. The leaves are a rich green color. Large bulbs. Each 15c.; dozen \$1.50.

Spotted Leaf (Richardia alba maculata). Dark green foliage, beautifully spotted with white. Each 10c.; dozen \$1.00.

White (Richardia Aethiopica). The White Calla, or Lily of the Nile, is a well-known plant of easy culture, and in Winter is one of our best window plants.

Good roots. Each 15c.; dozen \$1.50.

Extra large roots, each 25c.; doz. \$2.50.

Yellow, Elliottiana. The finest yellow Calla; large, rich, deep golden flowers, often 4 to 5 inches across at the mouth; habit of growth and foliage like the old favorite White Calla, excepting the leaves of Elliottiana are spotted with white. Each 30c.; dozen \$3.00.

CHIONODOXA.

(Glory of the Snow)

Most charming Spring-flowering bulbs. They produce flower-spikes bearing ten to fifteen Scilla-like flowers. They are perfectly hardy, and will thrive in any good garden soil. Fine for pot culture for Winter blooming.

Luciliae. Bright blue, clear white center. Dozen 25c.; 100 \$1.25.

Sardensis. Very deep blue. Dozen 25c.; 100 \$1.25.

COLCHICUM.

(Autumn-flowering Crocus)

Very effective and handsome, hardy plants, the flowers of which come through the ground without leaves in the Fall, the leaves appearing the following Spring.

Autumnale fl. pl. (Meadow Saffron). Each 10c.; dozen \$1.00; 100 \$7.00.

Autumnale, Mixed. All colors. Each 10c.; dozen 50c.; 100 \$4.00.

Crinum

Splendid large-flowering bulbs, closely allied to the amaryllis. The most suitable soil is a compost of turfy loam, cow-manure and some sand. They should be grown in large pots or tubs, about three-fourths of the bulb being out of the soil.

Powell. It produces long stems, bearing at the top five to eight large, dark rose, bell-shaped flowers 3 to 4 inches long. Each 30c.; dozen \$3.00.
Powell album. Pure white. Each 40c.; dozen \$4.00.

Crocus

(For Pots and Borders)

The bulbs should be set 3 inches deep, and be planted in October or early in November to insure success. The Crocus can also be grown indoors either in pots or bulb pans in loam, or in dishes filled with wet moss, in which the bulbs are set closely, half an inch below the surface.

Hybrid Named Crocus.

These are composed of all the best and most beautiful varieties and are remarkable for richness of color and the immense size of their flowers.



Mixed Crocus.

Albion. Fine striped.
Baron von Brunow. Dark purple.
Cloth of Gold. Golden yellow, striped brown.
David Rizzio. Purple.
Golden Yellow.
King of the Blues. Very large.
King of the Whites. Pure white.
Mont Blanc. Finest of all the whites.
Non Plus Ultra. Blue, white-bordered.
Sir Walter Scott. Variegated.
 Price: Dozen 20c.; 100 \$1.25; 1000 \$10.00.

Mixtures of Crocuses.

Large-flowered White.
Large-flowered Blue and Purple.
Large-flowered, Striped and Variegated.
Large-flowered Golden Yellow.
Mixture of all Colors.
 Price: Dozen 10c.; 100 75c.; 1000 \$6.00.

CROWN IMPERIAL.

Stately growing plants for outdoor culture, with dark green foliage and flowers of various shades of yellow and crimson. Mixed colors. Each 15c.; dozen \$1.50.

CYCLAMEN.

(Ready in November)

Among the many charming plants which grace the greenhouse and sitting-room during the Spring and Winter months, few, if any, are so pretty and accommodating as the Cyclamen. The simplicity of its culture brings it within the reach of even those who can command no better accommodation than a sitting-room window.

Album. Purest white. Each 15c.; dozen \$1.50.
Roseum. Soft pink. Each 15c.; dozen \$1.50.
Rubrum. Dark crimson. Each 15c.; dozen \$1.50.
Finest Mixed. Each 10c.; dozen \$1.00.

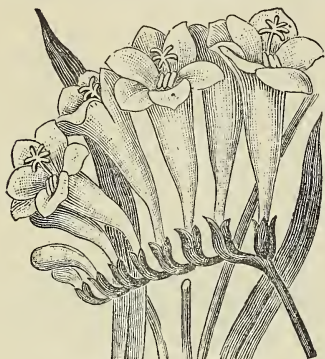
Dielytra Spectabilis.

(Bleeding Heart)

A well-known hardy plant, bearing in Spring long racemes of deep rose-pink, pendent flowers. Ready in November. Each 20c.; dozen \$2.00.



Cyclamen Persicum Gigantum.



Freesia Refracta Alba.

Freessia

This is one of the most beautiful of all Cape bulbs, possessing a peculiar grace of form, and its fragrance is most delightful, one pot of five or six bulbs being sufficient to perfume a whole house. As cut flowers, they are extremely valuable; the unexpanded blooms, opening in water, fill the air with the most delicate perfume, and their endurance is really remarkable.

Purity. A magnificent, snowy white of very large size and great length of stem. A truss bearing from eight to ten buds, of which six are often open at one time.

First Size Bulbs, each 5c.; dozen 40c.; 100 \$2.50.

Mammoth Bulbs, each 5c.; dozen 50c.; 100 \$3.50.

Refracta alba. Pure white. One of the best bulbs for pot culture. They force very easily, and can be had in bloom by Christmas if started in pots in the month of September.

| | Each | Doz. | 100 | 1000 |
|-------------------------------|--------|--------|--------|---------|
| Jumbo Bulbs | \$0.05 | \$0.40 | \$2.50 | \$20.00 |
| Mammoth Bulbs | .05 | .30 | 2.00 | 15.00 |
| First Size Bulbs | .03 | .20 | 1.25 | 10.00 |

GLADIOLUS COLVILLEI.

(Ready in November)

Early-flowering and fine for pot culture. They will last in water for weeks after being cut, and, as the flowers are smaller than Autumn-flowering sorts, they make up well for bouquets. They are hardier than most of the Gladioli, but will not stand severe Winters without covering.

| | Doz. | 100 | 1000 |
|---|--------|--------|---------|
| Alba (The Bride). White; very beautiful. | \$0.20 | \$1.50 | \$12.00 |
| Blushing Bride. Rosy white, with carmine blotch. | .20 | 1.25 | 10.00 |
| Fiery Knight. Brilliant scarlet, flaked violet carmine | .50 | 3.50 | 30.00 |
| Peach Blossom. Lovely new variety; good Winter forcer; delicate pink. | .30 | 2.00 | 18.00 |
| Queen of Holland. Pure white, with a distinct carmine blotch. | .30 | 2.00 | 17.50 |

GLOXINIAS.

These are desirable summer-flowering plants for both greenhouse and window.

| | Each | Doz. | 100 |
|--|--------|--------|---------|
| Colestinum. Blue. | \$0.15 | \$1.50 | \$10.00 |
| Defiance. Bright crimson | .15 | 1.50 | 10.00 |
| Kaiser Frederick. Scarlet, white margin. | .15 | 1.50 | 10.00 |
| Kaiser William. Blue, white border. | .15 | 1.50 | 10.00 |
| Mount Blanc. Snow white. | .15 | 1.50 | 10.00 |
| Tigridia. Spotted | .15 | 1.50 | 10.00 |
| Large-Flowering. All colors, mixed. | .10 | 1.00 | 8.00 |

GRAPE HYACINTHS.

Adapted for permanent beds and edgings and partly shaded situations; they should be massed together to produce effect. Perfectly hardy. Flower-spikes about 6 inches high, with small, round bells, resembling a bunch of grapes.

| | |
|---|-----------------------------------|
| Blue | 2 for 5c.; dozen 20c.; 100 \$1.00 |
| White | each 5c.; dozen 30c.; 100 1.50 |
| Hyacinthus candicans. A snow-white, summer-flowering Giant Hyacinth each 5c.; dozen 50c.; 100 3.50 | |

GERMAN IRIS.

This variety is the true "Fleur-de-Lis," the national flower of France. They are perfectly hardy, thrive anywhere. Mixed varieties. Each 5c.; dozen 35c.; 100 \$2.50.

JAPAN IRIS.

The Japan Iris is perfectly hardy, and flowers in great profusion in July and August. We offer a collection of named varieties.

| | |
|---|--|
| Named Varieties. Strong roots. Each 25c.; dozen \$2.50; 100 \$20.00. | |
| Mixed Varieties. Strong roots. Each 15c.; dozen 1.50; 100 10.00. | |

English Iris

Large, handsome flowers, with rich purple, blue and lilac colors predominating. Perfectly hardy.

Blanche Fleur. White, bluish tinted.

Bleu Celeste. Pale blue.

De Lemartin. White, with large rose blotches.

Johanna. White, spotted light blue.

Julius. Large dark blue.

King of Blues. Dark blue

La Grandesse. White, spotted violet.

Maria Cornelia. Light blue.

Mont Blanc. Pure white.

Mr. Standley. White, spotted red.

The above named varieties, doz. 50c.; 100 \$3.00.

Mixed Varieties. Each 5c.; doz. 30c.; 100 \$1.50.

SPANISH IRIS.

These are extremely early and produce fragrant Orchid-like flowers of rich and beautiful colors. They are excellent for forcing, either in pans or in boxes for cutting.

Belle Chinoise. Golden yellow.

Blanche Superbe. Pure white.

British Queen. Pure white.

Louise. Very delicate light blue.

Bronze King. A very dark bronze.

Chrysolora. Canary-yellow.

Excelsior. Light violet-blue.

King of the Blues. Dark blue.

The above named varieties, doz. 20c.; 100 \$1.10.

Superfine Mixed. Doz. 10c.; 100 75c.; 1000 \$5.00.



English Iris.

IXIAS.

Very desirable for pots or for the open ground. If planted out, they require covering during the Winter.

| | Doz. | 100 |
|---|--------|--------|
| Alba Mutabilis. Rose changing to white..... | \$0.20 | \$1.00 |
| Crateroides Major. Beautiful brilliant scarlet..... | .30 | 2.00 |
| Hercules. White and lilac, rosy eye..... | .20 | 1.00 |
| Praestans. Deep purple | .20 | 1.00 |
| William the Conqueror. Creamy white with purple center | .20 | 1.00 |
| Wonder. Beautiful double pink | .20 | 1.50 |
| Fine Mixed. All Colors..... | .20 | 1.00 |



Lily of the Valley.

LILY OF THE VALLEY.

(Ready in November.)

For forcing, the pips are to be preferred, being grown under conditions tending to promote vigorous and early blooming. Twelve to eighteen pips may be planted in a 6-inch pot, with all the fibrous roots carefully preserved, and keeping the crowns above the soil. Place them in a temperature of about 80 degrees, cover the crowns with loose moss, and keep them constantly moist with tepid water.

Marshall's Matchless Dresden Pips. The earliest, largest and best for forcing. Extra strong pips with long roots producing flowers with 15 to 20 bells and fine foliage. Per 100 \$2.50; 1000 \$22.00.

Best Berlin Pips. Finest selected pips for forcing. Doz. 30c.; 100 \$2.00; 1000 \$18.00.

Hamburg. Strongest pips for late Winter and Spring forcing. Doz. 25c.; 100 \$1.75; 1000 \$15.00.

Large Dutch Clumps. Each contains many flowering pips; best for planting in the open ground. Each 25c.; doz. \$2.50; 100 \$20.00.

Cold Storage Berlin Pips. For forcing at all seasons. 250 \$6.50; 500 \$12.00; 1000 \$22.50.

Cold Storage Dresden Pips. 250 \$7.00; 500 \$13.00; 1000 \$25.00.

Lilium Candidum

(Ascension or Madonna Lily.)

This is the old-fashioned garden Lily. The many snow-white flowers borne on a stem 3 to 4 feet high make this Lily most effective. Very large bulbs, ready for delivery in September.

First Size Bulbs. Each 15c.; dozen \$1.50; 100 \$ 8.00.

Mammoth Bulbs. Each 20c.; dozen 2.50; 100 10.00.

LILIUM HARRISII.

The Bermuda Easter Lily is perhaps the finest and most popular of Winter-blooming plants. The large, handsome, pure white trumpet-shaped flowers are very sweet-scented and of great substance, and last a long time after cutting. Its stately and graceful habit renders it a perfect pot plant for table or Winter decorations.

First Size Bulbs. 7 to 9 inches in circumference. Each 25c.; dozen \$2.50; 100 \$15.00.

Mammoth Bulbs. 9 to 11 inches in circumference. Each 50c.; dozen 4.00; 100 30.00.

LILIUM FORMOSUM.

A new type from the Island of Formosa. Pure white flowers, larger than those of *L. Harrisii*.

First Size Bulbs. 7 to 9 inches in circumference.

Each 15c.; dozen \$1.50; 100 \$12.00.

Mammoth Bulbs. 9 to 10 inches in circumference.

Each 20c.; dozen \$2.50; 100 \$20.00.

Monster Bulbs. 11 to 13 inches in circumference.

Each 40c.; dozen \$4.00; 100 \$25.00.

LILIUM GIGANTEUM.

This variety flowers somewhat later than *Multi-florum*, but the flowers are of larger size, of great substance and perfect form.

First Size Bulbs. 7 to 9 inches in circumference.

Each 15c.; dozen \$1.50; 100 \$12.00.

Mammoth Bulbs. 9 to 10 inches in circumference.

Each 20c.; doz. \$2.00; 100 \$16.00.

LILIUM LONGIFLORUM MULTIFLORUM.

The well-known, snow-white, fragrant Lily; fine for forcing and handsome in the garden.

Mammoth Bulbs. 9 to 10 inches in circumference.

Each 20c.; dozen \$2.00; 100 \$14.00.



Lilium Formosum.

HARDY LILIES.

For Outdoor Planting, or Growing in Pots. (Ready in November.)

When grown in the border or open ground, they should remain undisturbed for years, frequent removals being injurious. In the Autumn, a covering of leaves, coarse manure or boughs will prove highly beneficial. Plant at least 6 inches deep.

Auratum (Golden-Banded Lily.) The grandest of all hardy Lilies.

| | Each | Doz. | 100 |
|---|--------|--------|---------|
| Extra large bulbs 9 to 11 inches..... | \$0.20 | \$2.00 | \$15.00 |
| Mammoth bulbs 11 to 13 inches..... | .30 | 3.00 | 22.00 |
| Canadense Rubrum. Bell shaped red flowers..... | .15 | 1.50 | 12.00 |
| Elegans Robusta. Orange, spotted black..... | .15 | 1.50 | 12.00 |
| Henryi. The yellow Speciosum. Bright orange yellow..... | 1.00 | 10.00 | |
| Pardalinum (Leopard Lily). Rich scarlet and yellow flower, spotted with rich brown..... | .15 | 1.25 | 10.00 |
| Speciosum Album. Beautiful pure white flowers of large size. | | | |
| Extra large bulbs 8 to 9 inches..... | .20 | 2.00 | 14.00 |
| Mammoth bulbs 9 to 11 inches..... | .35 | 3.50 | 25.00 |
| Speciosum Rubrum Magnificum. White, shaded rose and spotted deep red. | | | |
| Extra large bulbs 9 to 11 inches..... | .20 | 2.00 | 15.00 |
| Mammoth bulbs 11 to 13 inches..... | .35 | 3.50 | 25.00 |
| Superbum. Flowers bright orange red, thickly spotted with purple..... | .10 | 1.00 | 6.00 |
| Tigrinum Splendens (Single Tiger Lily). Rich scarlet, with black spots..... | .10 | 1.00 | 7.00 |
| Tigrinum Flore Pleno (Double Tiger Lily). Bright orange red, with black spots..... | .12 | 1.25 | 8.00 |
| Tenuifolium (Siberian Coral Lily). Nodding, rich scarlet flowers..... | .20 | 2.00 | 12.00 |
| Wallacei. Rich vermilion-orange..... | .15 | 1.25 | 10.00 |

Montbretias

(Ready in November.)

Hardy Summer-flowering, bulbous plants that are becoming more popular every year. They should be planted in groups and left undisturbed.

| | Doz. | 100 | 1000 |
|---|--------|--------|---------|
| Bouquet Parfait. Vermilion with yellow centre..... | \$0.30 | \$1.50 | \$12.00 |
| Crocsmiaflora. Large, bright orange, tinged scarlet | .30 | 1.50 | 12.00 |
| Drap d'Or. Orange-yellow..... | .30 | 1.50 | 12.00 |
| Eldorado. Beautiful dark yellow..... | | | 12.00 |
| Etoile de Feu. Bright vermilion and scarlet; large flowers | .30 | 1.50 | 12.00 |
| Gerbe d'Or. Golden yellow..... | .30 | 1.50 | 12.00 |
| Pottsi. Orange and scarlet; very free flowering..... | .30 | 1.50 | 12.00 |
| Rayon d'Or. Ochre yellow and brown..... | .30 | 1.50 | 12.00 |

ORNITHOGALUM ARABICUM.

(Star of Bethlehem)

Very desirable for pot culture in the window garden. The flowers are large, pure white with black center, borne on a tall spike. In pots they should be treated in the same manner as the Hyacinth. Each 5c.; dozen 40c.; 100 \$3.00.

OXALIS.

A class of small bulbs, producing vast quantities of flowers during the Autumn and Winter months; they are very desirable for planting in hanging baskets. They are easily grown in sandy soil, seven or eight bulbs in a 4 or 5-inch pot. Keep in moderate temperature.

Buttercup. A splendid Winter-blooming plant for pot culture. The flowers are pure bright yellow, and produced in great abundance. It is very easily cultivated, and, being a strong grower, only one or two bulbs should be planted in a 5 or 6-inch pot. Dozen 30c.; 100 \$1.75; 1000 \$15.00.

Deppei. Pure white, very fine. Dozen 10c.; 100 60c.

Deppei Rosea. Pink. Dozen 10c.; 100 60c.

Purpurea. Purple. Dozen 10c.; 100 60c.

Lasandria. Rosy pink, cut foliage. Dozen 10c.; 100 60c.

Fine Mixed. All colors. Dozen 10c.; 100 50c.



Oxalis, Buttercup.

PEONIES.

(Ready in October)

The old-fashioned double Peonies are too well known to require description. Among hardy herbaceous perennials, the Chinese Peonies rank about first for lawn or flower border or shrubbery decoration.

| | Each | Doz. | 100 |
|--|--------|--------|---------|
| Officinalis Alba. Rose changing to white..... | \$0.15 | \$1.50 | \$12.00 |
| Officinalis Rosea. Pink.... | .15 | 1.50 | 12.00 |
| Officinalis Rubra. Scarlet . | .15 | 1.50 | 12.00 |

RANUNCULUS.

Gorgeous dwarf flowers, easily grown in pots for Winter blooming, or in cold-frames for Spring. Eight roots may be potted in a 6-inch bulb-pan; they should be covered one inch. The colors include shades of white, yellow, crimson and purple, some being almost black. They are very effective for decoration, either as pot plants or cut.

| | Doz. | 100 | 1000 |
|---|--------|--------|--------|
| Giant Double French. Mixed colors..... | \$0.15 | \$0.80 | \$7.00 |

SCILLAS.

Extremely hardy, early-flowering bulbs, thriving in any situation and worthy of more general cultivation. The bulbs of Scilla Sibirica should be planted 3 inches deep.

| | Doz. | 100 | 1000 |
|--|--------|--------|---------|
| Sibirica. Flowers bright blue, of compact growth, 5 to 6 inches high; beautiful in combination with Snowdrops or Crocuses; also excellent for forcing in pans. Extra large bulbs..... | \$0.20 | \$1.50 | \$12.00 |
| Campanulata (Wood Hyacinth). Blue..... | .20 | 1.50 | 12.00 |
| Campanulata Alba. White | .20 | 1.50 | 12.00 |
| Campanulata Rosea. Rose..... | .20 | 1.50 | 12.00 |

Snowdrops

The charming Snowdrop is the first of all flowers to herald the approach of Spring. As the bulbs are small, they should be planted liberally.

Elwe's Giant Snowdrops. An exceedingly large and beautiful single variety; flowers snow-white, with emerald-green tube. Dozen, 15c.; 100 \$1.00; 1000 \$8.00.

Single. Pure white, graceful bells; early flowering. Doz. 15c.; 100 \$1.00; 1000 \$8.00.

Double. Flowers perfectly double, pure white. Doz. 25c.; 100 \$1.75; 1000 \$15.00.

SPARAXIS.

Excellent for pots or cold-frames and succeed well outside with protection in cold weather.

Mixed Varieties. 2 for 5c.; dozen 20c.; 100 \$1.00.

SPIRAEA.

(Ready in November)

Splendid plants for forcing in the greenhouse or the conservatory, where they produce beautiful sprays of flowers during February and March; they are perfectly hardy, and, when planted outside, flower in June. The dark green foliage resembles some of our well-known Ferns.



Snowdrop, Elwe's Giant.

Astilboides floribunda. Very large, pure white plumes, bronzed foliage.\$0.15 \$1.50 \$9.00

Gladstone. A much improved variety, producing enormous spikes of pure white flowers in great profusion.25 2.50 15.00

Japonica. Elegant and graceful; large, feathery, pure white, sweet-scented flowers15 1.50 7.00

Queen Alexandra. The color is a delightful soft pink; very free-flowering; growing as freely as the white types30 3.00 20.00

WATSONIA.

Ardernei. The bulbs resemble gladioli, sending up stems to a height of 3 to 4 feet, each stem bearing about a dozen snow-white flowers. Fine for forcing in the greenhouse or planting outdoors in spring, like the gladioli. Each 20c.; dozen \$2.00; 100 \$14.00.

CARNATIONS, New and Choice Varieties.

Alma Ward. White.

Beacon. A fine scarlet.

Benora. White pencilled red.

Brooklyn. Pink, deeply fringed.

Enchantress Pink. A well known sort.

Enchantress Rose-Pink. Lovely rose-pink.

Enchantress White. Pure white.

Mrs. C. W. Ward. Splendid rose-pink.

Mrs. M. A. Patten. Variegated.

White Perfection. A grand white.

White Wonder. Large white.

Windsor. A free blooming pink.

Field grown plants of any of the above (Fall delivery), \$1.50 per doz., \$10.00 per 100.

VIOLET PLANTS.

Farquhar. Single blue.

Lady H. Campbell. Fine blue.

Marie Louise. Deep blue.

Princess of Wales. Single blue.

Field grown roots of the above (Fall delivery), \$1.50 per dozen, \$10.00 per 100.

Azalea Indica

Apollo. Vermillion.
Bernard Andre alba. Double white.
De Schryveriana. Double red and white.
Deutsche Perle. Double white.
Empress of India. Double salmon.

12 in. Diameter.....each 50c.; doz. \$5.00
 14 in. Diameter.....each 75c.; doz. 7.50
 15 in. Diameter.....each \$1.00; doz. 10.00
 16 in. Diameter.....each 1.50; doz. 15.00

Memoire de Louis Van Houtte. Double rose.
Pharailde Mathilde. Double white and red.
Professor Wolters. Single pink.
Simon Mardner. Double velvety rose.
Vervaeiana. Double salmon rose.

18 in. Diameter.....each \$2.00; doz. \$20.00
 20 in. Diameter.....each 2.50; doz. 27.50
 24 in. Diameter.....each 3.50; doz. 37.50

AZALEA MOLLIS.

Well budded plants for forcing. 75 cts. to \$2.00 each.

A C A C I A.

Armata. Bright yellow; very fragrant. 18 to 24 inches. Each \$1.50.
Farnesiana. Large yellow globular flowers. Each \$1.00.

CAMELLIA JAPONICA.

Well budded plants. 12 to 15 inches. Each \$1.00. Extra strong \$1.50 to \$2.50.

D E U T Z I A S.

Gracilis. Dwarf bushy habit. Pot grown. Each 50c.; dozen \$5.00.
Lemoine. Pure white, erect growing. Pot grown. Each 50c.; dozen \$5.00.

E R I C A , H E A T H.

Herbacea. Bright flesh color. Plants in 4-in. pots. Each 50c.; dozen \$5.00.

H Y D R A N G E A S.

New Improved French varieties. Fine for forcing.

Avalanche. Pure white.
Bouquet-Rose. Rosy amber.
Dentelle. Creamy white.
Eclaireur. Dark pink.
Genl. Vicomtesse de Vibraye. Bright pink.
La Lorraine. Rose.
Mme. Emile Moulliere. Pure white.

Mme. Maurice Hamar. Pink.
Mme. Raoul. Fiery pink.
Mlle. Agnes Barillet. Creamy white.
Mlle. Renee Gaillard. Creamy white.
Radiant. Rose-carmine.
Souvenir de Mme. Chautard. Rose.

4 to 5 branches.....each \$1.00; doz. \$10.00 | 8 to 9 branches.....each \$1.50; doz. \$15.00
 6 to 7 branches.....each 1.25; doz. 12.50 | 10 to 11 branches.....each 1.75; doz. 17.50

GARDENIA. Cape Jasmine.

Florida. 3 in pots, 30c. each; \$3.00 dozen; 4 in pots, 50c. each; \$5.00 dozen.

LILACS (Syringia.)

Charles X. Deep red purple. **Souvenir de Louis Spath.** Reddish lilac. **Marie Legraye.** Single white.
 Pot grown plants, well budded. Each \$1.00 to \$1.50.

R H O D O D E N D R O N S.

Named Hybrids for forcing. Well budded plants.

12 to 18 inches.....Each \$1.25; dozen \$12.50
 18 to 24 inches.....Each 2.00; dozen 20.00
 24 to 30 inches.....Each 2.50; dozen 25.00

Strawberry Plants

Those marked (P.) have pistillate, or imperfect flowers, and must be planted near perfect-flowering kinds, in order that the flowers may be fertilized. The varieties not so marked are bisexual, or perfect-flowering, and can be planted alone.

Pot-grown plants, if planted in the Fall, will furnish a good crop of large, fine berries of the following season.

Auto. Immensely productive; large berries.

August Luther. Good size and very productive. Extra early.

Bederwood. One of the best earlies; large bright red, conical fruit.

Brandywine. Large, conical, glossy, crimson, firm and solid. Succeed in any soil. Midseason to late.

Bubach (P.). Large berry of dark color. Midseason.

Cardinal (P.). Berries medium to large, uniform in shape and size; mid-season.

Chesapeake. Very large, of fine form and as late as Gandy.

Clyde. Very regular, bright scarlet berries; large and of excellent flavor; firm, and a good shipper. Plant remarkably healthy, vigorous and productive. Season early.

Commonwealth. New. Very large, fine flavored, juicy. Very late.

Excelsior. Very fine, stands frost well. Extra early.

Gandy. Large, bright glossy crimson fruit; finest flavor. Late.

Glen Mary. Strong and healthy grower, bright crimson. Early.

Hunn. (P.). Largest variety grown. Dark crimson, fine flavor. Late.

Marshall. Large, dark crimson color, and of delicious flavor. Midseason.

New York. Very large, color dark red; first-class quality. Midseason.

Nick Ohmer. Fruit mammoth size; very productive. Midseason.

New Home. Bright red color, as large and late as Gandy.

Oom Paul. One of the largest berries; firm and productive.

Scofield. Large, bright red. Rich, aromatic flavor. Early to late.

Senator Dunlap. Fruit is of good size, regular and attractive in form, deep red in color without and within, firm in substance and of excellent quality. Second early.

Success. Sweet, mild flavor; large, very early and bearing till Fall.

Wm. Belt. The berries are as large as Bubach, more uniform in shape, just as productive, and the color is perfect. Midseason to late.

Twentieth Century. (P.) Immense size, dark crimson, smooth surface. Midseason.

We can also furnish other varieties not named above, at regular prices.

Pot-Grown Plants (ready in July). 25 \$1.25; 50 \$2.00; 100 \$3.50.

Layer Plants (ready in August). Dozen 30c.; 50 75c.; 100 \$1.25.



New Varieties of Strawberries

Laxton. One of the finest English varieties. Very large and productive. Dozen \$1.00; 100 \$7.00.

Royal Sovereign. Large and conical shape; color bright scarlet. Fine for early forcing. Doz. \$1.00; 100 \$7.00.

Saint Antoine de Padrone. Large dark red fruit; a perpetual bearer. Dozen \$1.00; 100 \$7.00.

CELERY PLANTS.

We can supply the following varieties: Golden Self-Blanching, Fin de Siecle, White Plume, Perfection Heartwell, Giant Pascal and Golden Dwarf. Per 100 50c.; 1000 \$4.50.

VEGETABLE PLANTS.

| | | |
|---|--------|--------|
| Brussels Sprouts. Long Island Improved..... | \$0.20 | \$1.00 |
| Cabbage. Flat Dutch, Savoy or Red..... | .15 | .50 |
| Kale or Borecole. Dwarf Scotch or German..... | .15 | .50 |

Hardy Roses

Hardy Hybrid Perpetual Roses.

The plants offered are exceptionally heavy, two-year-old stock, which will, under ordinary conditions, give a full crop of flowers this season; and, while their main crop is produced in June, they frequently produce fine flowers throughout summer and autumn.

- Anna de Diesbach.** Clear, bright carmine; very large, finely shaped; full and fragrant.
Baron Bonstettin. Dark crimson.
Baroness Rothschild. Superb rose, of rich satiny pink.
Captain Christy. Delicate rose.
Celine Forestier. Yellow.
Duke of Edinburgh. Bright carmine.
Frau Karl Druschki. Fine snow-white variety; vigorous grower and very hardy.
General Jacqueminot. Brilliant scarlet-crimson; superb flower.
Gloire de Dijon. Shaded salmon.
Hugh Dickson. Crimson, shaded scarlet.
John Hopper. Rose-crimson, fine center.
Magna Charta. Bright pink, suffused with carmine; a beautiful Rose; strong grower.
Margaret Dickson. The finest white hybrid.
Mrs. John Laing. Soft pink, of beautiful form; exceedingly fragrant.
Mrs. R. G. Sharman-Crawford. Deep rosy pink, outer petals shaded with pale flesh.
Paul Neyron. Dark rose; fine, extra large flower.
Perle des Blanches. White, pale center.
Ulrich Brunner. Bright, cerise-red; flowers large.
 Extra strong, 2-year-old, field-grown plants, 30c. each; \$2.50 for 10.

Climbing Roses.

These are all varieties of established merit, perfectly hardy in the Northern states.

- Baltimore Belle.** Pale blush, variegated carmine-rose and white; very double; flowers in beautiful clusters.
Crimson Rambler. The well-known climbing cluster Rose. Pure crimson, vigorous grower.
Dorothy Perkins. Strong as Crimson Rambler; the flowers are borne in clusters; are double, sweetly scented and of a beautiful shell-pink.
Flower of Fairfield. The everblooming Crimson Rambler.
Hiawatha. Deep scarlet with light center; single flowers.
Lady Gay (Wichuraiana). Cherry-pink, fading to soft white; very rapid grower.
Philadelphia Rambler. Crimson; hardy robust grower.
Tausendschön. Soft pink, changing to rosy-carmine.
Yellow Rambler. Similar to Crimson Rambler, and perfectly hardy. Yellow trusses.
 Strong 2-year-old plants, 25 cts. each; \$2.00 for 10.

Standard, or Tree Roses.

We can supply a number of varieties on Rosa Rugosa stock.

75 cts. each; \$7.50 per dozen.

Hybrid Tea, or Everblooming Roses.

This selection will produce a mass of Roses to cut from the entire season. The plants have been grown with special care, and the varieties are the very best for out-door culture; invaluable either for display or cutting, and are hardy with protection.

- American Beauty.** Deep crimson.
Betty. Salmon shaded yellow.
Countess of Gosford. Salmon pink with saffron yellow at base of petals.
Dean Hole. Carmine and salmon.
Duchess of Albany. Deep rosy-pink.
Duchess of Wellington. Saffron yellow. Ea. 45c.; 10 for \$4.00.
Earl of Warwick. Salmon pink.
Edu. Meyer. Shaded red and orange.
Etoile de France. Fine velvety crimson flowers.
Farbenkönigin. Color clear red, shaded silvery pink.
Franz Deegen. Golden yellow.
Grace Darling. Creamy white, flushed pink.
General MacArthur. Crimson.
George C. Waud. Orange-Vermillion.
Glorie de Chedarn Guinoisseau. Vermillion rose. Each 45c.; 10 for \$4.00.
Gruss an Teplitz. A perfect crimson-scarlet.
Harry Kirk. Deep sulphur-yellow.
Jonkheer J. L. Mock. Carmine changing to imperial pink.
Kaiserin Augusta Victoria. This is the finest and largest white Rose.
Killarney. Bright, rich coral-pink.
Lady Ashtown. The best bright pink.
Lady Hillingdon. Canary yellow. Each 45c.; 10 for \$4.00.
Laurent Carl. Velvety-carmine.
Liberty. Flower is of large size, magnificent color—rich, velvety crimson.
Lyon-Rose. Coral red, shaded with yellow; very fragrant.
Mme. Abel Chatenay. A grand bedding Rose; color rosy carmine shaded salmon.
Mme. Caroline Testout. Clear, brilliant pink, without shading of any kind.
Mme. Jules Grolez. The color is China rose, passing to clear, rich satiny pink.
Mme. Ravary. Beautiful orange yellow.
Maman Cochet. A magnificent pink Rose.
Maman Cochet White. White.
Mildred Grant. Blush white, tinted pink.
Molly Sharman Crawford. White.
Mrs. Aaron Ward. Distinct Indian yellow.
Mrs. Wakefield C. Miller. Pale salmon and rose. Each 45c.; 10 for \$4.00.
Pharisaer. Tender rosy flowers borne on long strong stems.
Prince de Bulgarie. Silvery flesh-pink, shaded with salmon.
Richmond. Beautiful pure scarlet-red flowers.
Soleil d'Or. Deep orange and yellow.
Souvenir de la Malmaison. White and flesh.
White Killarney. A grand Rose.
William Shean. Pure pink.

Strong 2-year-old plant, except where priced, 35 cts. each; \$3.00 for 10.

Marshall's Lawn Grass Seed

MARSHALL'S SPECIAL LAWN GRASS MIXTURE.

Marshall's Special Lawn Grass Seed produces a perfect and enduring lawn luxuriant richness with closely interwoven, firm and elastic turf, and it is usually ready for cutting in six weeks from time of sowing. This Lawn Grass is composed of a combination of various fine-leaved, deep-rooting grasses of interweaving habit, that flourish under our varied conditions, soils and climates, growing during different seasons of the year, so that a deep green, smooth and velvety sward, free from clumps, is maintained without burning brown in Summer.

Price: Per peck (5 lbs.), \$1.50; per bushel (20 lbs.), \$5.00.

MARSHALL'S CENTRAL PARK LAWN GRASS.

Marshall's Central Park Lawn Grass will produce an even, dense growth of permanent sward as early in the season as it is possible to do. This mixture contains no annual grasses for making quick show to the detriment of a good lawn, but only those of lasting value and hardness, which, when once established, need no reseeded for years. Our seed, which we know to be as pure as can be found anywhere, is of the best varieties, best suited for even and permanent growth; it is carefully cleaned and as free as it is possible to make it from foreign matter.

Price: per quart, 20c.; per peck, \$1.10; per bushel (20 lbs.), \$4.00

MARSHALL'S FRENCH LAWN GRASS.

A thoroughly good mixture of Grasses made from the best varieties adapted for general lawn purposes. Per quart, 20c.; per peck, \$1.00; per bushel (15 lbs.), \$3.50.

MARSHALL'S SHADY PLACE LAWN GRASS.

Usually it is quite difficult to obtain a satisfactory growth of grass under trees and in shady places; for sowing in such places we recommend the use of this special mixture. It will quickly produce an abundant and even growth of beautiful green grass. The grasses used in making this special mixture are only those that are well adapted for growing in shade. It has been successfully used on some large operations where a green sward was desired on land partially shaded by old trees.

Price, per quart, 30c.; by mail, 40c.; 4 quarts, \$1.00; per peck (5 lbs.), \$1.60; per bushel (20 lbs.), \$6.00.

PERMANENT GRASS MIXTURES FOR GOLF LINKS.

MARSHALL'S FAIR GREEN MIXTURE.

This is composed mainly of perennial native grasses and two very important European grasses which have proven of great value for Fair-Green use. They are all of dwarf, spreading growth, forming a close velvety surface which improves from year to year if given proper care.

Per bushel (20 lbs.), \$3.50.

MARSHALL'S PUTTING-GREEN MIXTURE.

The hardest and finest low growing Grasses are contained in this mixture. It produces a beautiful and lasting green turf calculated to withstand hard wear and tear.

Per peck, \$1.75; per bushel (24 lbs.), \$6.00.

GRASSES FOR PERMANENT HAY CROPS AND PASTURES.

The result obtained from our Special Grass Seed mixtures are well known by the constantly increasing demand for them. Fall seeding is preferable, but spring sowing will be successful if done early, while the land is cool and moist. In addition to the Grasses, we advise sowing 5 pounds of Mixed Clover Seed per acre. Clover Seed should be sown separately as it is heavier than Grass Seeds and settles at the bottom when mixed with them, and in consequence is likely to be sown unevenly.

MIXTURES FOR PERMANENT PASTURES FOR ONE ACRE.

| | | |
|------------------------------------|----------------|----------------|
| FOR GOOD SOILS, COOL AND MOIST. | FOR DRY SOILS. | FOR WET SOILS. |
|------------------------------------|----------------|----------------|

Per bushel 15 (lbs.), \$3.00; per acre (40 lbs.), \$8.00.

PERMANENT MIXTURES FOR HAY CROPS FOR ONE ACRE.

| | | |
|------------------------------------|----------------------|----------------|
| FOR GOOD SOILS, COOL AND MOIST. | FOR HIGH, DRY SOILS. | FOR WET SOILS. |
|------------------------------------|----------------------|----------------|

Per bushel 15 (lbs.), \$3.00; per acre (40 lbs.), \$8.00.

5 lbs. Mixed Clover Seed sufficient for one acre, \$1.25.

Hardy Perennial Flower Seeds

FOR AUTUMN SOWING

| | Pkt. | Oz. | | Pkt. | Oz. |
|---|--------|--------|---|--------|--------|
| Achillea Ptarmica, double, "The Pearl" | \$0.15 | | Hibiscus Moscheutos roseus | \$0.05 | \$0.50 |
| Aconitum Napellus | .10 | | Hollyhock, Double White | .10 | 2.00 |
| Aconitum pyramidatum | .10 | | Hollyhock, Double Rose | .10 | 2.00 |
| Adonis vernalis | .05 | \$0.30 | Hollyhock, Double Crimson | .10 | 2.00 |
| Alyssum saxatile compactum | .05 | .50 | Hollyhock, Double Maroon | .10 | 2.00 |
| Anemone coronaria, Single | .10 | | Hollyhock, Double Pink | .10 | 2.00 |
| Aquilegia chrysantha | .10 | | Hollyhock, Double Scarlet | .10 | 2.00 |
| Aquilegia coerulea | .15 | | Hollyhock, Double Yellow | .10 | 2.00 |
| Aquilegia vulgaris, Single Mixed | .05 | .30 | Hollyhock, Double Mixed | .10 | .75 |
| Aquilegia vulgaris, Double Mixed | .05 | .30 | Hollyhock, Collection, 6 varieties | .40 | |
| Arabis alpina | .10 | | Hollyhock, Collection, 10 varieties | .60 | |
| Asperula odorata | .10 | | Incarvillea Delavayi | .25 | |
| Auricula, Finest Mixed | .25 | | Inula Glandulosa | .25 | |
| Aubrieta deltoidea | .10 | | Leontopodium alpinum | .25 | |
| Aubrieta Gracet | .10 | | Lobelia Cardinalis | .25 | |
| Bocconia Japonica | .05 | .30 | Lobelia, Queen Victoria | .25 | |
| Calampelis scabra, Fine climber for trellises | .10 | | Lupinus polyphyllus, Mixed perennial | .05 | .35 |
| Callirhoe involucrata | .05 | .75 | Lychnis Chalcadonica | .05 | |
| Campanula, Medium Single Mixed | .05 | .30 | Lychnis Haageana hybrida | .10 | |
| Campanula, Medium Double Mixed | .10 | | Nierembergia frutescens | .10 | |
| Campanula persicifolia grandiflora, Blue | .25 | | Pansy, Matchless Mixture | .25 | 8.00 |
| Campanula persicifolia grandiflora, alba | .25 | | Pansy, Superb Giant Mixture | .25 | 5.00 |
| Campanula pyramidalis, Blue | .10 | .75 | Pansy, German Mixed | .10 | 1.50 |
| Campanula pyramidalis, White | .10 | .75 | Pansy, Good Mixed | .05 | 1.00 |
| Candytuft sempervirens | .10 | | Pansy, Emperor William | .10 | 1.50 |
| Candytuft Gibraltarica | .10 | | Pansy, Golden Queen | .10 | 1.50 |
| Cerastium tomentosum | .25 | | Pansy, Golden Yellow, with Dark Eye | .10 | 1.50 |
| Cowslip (Primula veris) | .10 | | Pansy, King of the Blacks | .10 | 1.50 |
| Daisy, Double White | .10 | 3.00 | Pansy, Lord Beaconsfield | .10 | 1.50 |
| Daisy, Double Red | .10 | 3.00 | Pansy, Orchid-flowered Mixed | .25 | 2.50 |
| Daisy, Double Snowball | .10 | 3.00 | Pansy, Ruby Red | .10 | 2.00 |
| Daisy, Double Longfellow | .10 | 3.00 | Pansy, Snow Queen | .10 | 1.50 |
| Daisy, Double Maxima, Extra large | .10 | 3.00 | Pansy, Striped | .20 | 2.50 |
| Daisy Shasta | .10 | | Pansy, White with Black Eye | .10 | 1.50 |
| Delphinium hybridum, Double | .25 | | Pansy, Trimardeau, Mixed | .10 | 2.00 |
| Delphinium azurium | .10 | .60 | Pentstemon, Marshall's Hybrids | .25 | |
| Delphinium Chinese, Mixed | .10 | .50 | Pentstemon, Mixed. Large-flowered varieties | .10 | |
| Delphinium formosum | .10 | .75 | Phlox decussata, Mixed | .10 | |
| Delphinium Zallil | .25 | | Platycodon grandiflorum | .10 | |
| Delphinium Nudicaule | .25 | | Platycodon grandiflorum album | .10 | |
| Dianthus Plumarius | .10 | 1.00 | Polyanthus, Finest | .10 | |
| Dianthus Semperflorens | .25 | | Polyanthus, Gold-laced | .25 | |
| Dianthus Hybridus | .10 | | Poppy Orientale | .10 | .75 |
| Dictamnus Fraxinella | .10 | .50 | Poppy Orientale, Mixed Hybrids | .10 | .75 |
| Eryngium giganteum | .10 | | Poppy nudicaule (Iceland Poppy) | .10 | |
| Erinus alpinus | .25 | | Poppy nudicaule album | .10 | |
| Eupatorium Fraseri | .10 | | Poppy nudicaule Mixed | .10 | .75 |
| Forget-me-not (Myosotis)— | | | Poppy bracteatum | .10 | |
| Alpestris, Blue | .05 | .60 | Primula Japonica | .10 | |
| Dissitiflora | .10 | | Primula Forbesi | .25 | |
| Robusta grandiflora | .10 | 1.00 | Primula vulgaris (English Yellow Primrose) | .10 | |
| Victoria | .15 | | Pyrethrum roseum hybridum— | | |
| Palustris | .10 | | Double Mixed | .25 | |
| Foxglove, Mixed | .05 | .30 | Single Mixed | .10 | |
| Foxglove gloxinoides, White | .10 | .50 | Scabiosa Caucasia | .10 | |
| Foxglove gloxinoides, Purple | .10 | .50 | Stokesia cyanea | .10 | |
| Foxglove gloxinoides, Rose | .10 | .50 | Sweet William, White Single | .05 | .25 |
| Foxglove gloxinoides, Mixed | .05 | .40 | Sweet William, Dark Crimson Sgl. | .05 | .34 |
| Foxglove monstrosa, Splendid Mix. | .10 | 1.50 | Sweet William, Mixed Single | .05 | .25 |
| Gailardia grandiflora maxima | .10 | .80 | Sweet William, Mixed Double | .10 | .75 |
| Gentiana acaulis | .10 | | Wallflower, Brown | .10 | .25 |
| Gumnera manicata | .25 | | Wallflower, Mixed | .05 | .40 |
| Gypsophila paniculata | .10 | .50 | Wallflower, Double Mixed German | .10 | |
| Heuchera sanguinea splendens | .15 | | | | |

Choice Vegetable Seeds

BEANS

| | Per pt. | Qt. |
|------------------------|---------|--------|
| Early Mohawk | \$0.15 | \$0.30 |
| Black Valentine | .20 | .40 |
| Refuge 1000-1 | .15 | .30 |
| Wonder of France | .20 | .40 |

BEEF

| | Per oz. | ¼ lb. |
|-----------------------|---------|--------|
| Egyptian | \$0.10 | \$0.30 |
| Crosby Egyptian | .10 | .30 |
| Crimson Globe | .10 | .40 |
| Eclipse | .10 | .30 |
| Sutton's Globe | .20 | .60 |

CABBAGE

| | Per oz. | ¼ lb. |
|------------------------------|---------|--------|
| Early Spring | \$0.25 | \$0.75 |
| Early Jersey Wakefield | .30 | 1.00 |
| Improved Early Summer | .20 | .60 |
| Succession Improved | .25 | .75 |
| Late Flat Dutch | .20 | .60 |

CAULIFLOWER

| | Per pkt. | Oz. |
|--------------------------------|----------|------|
| Extra Early Dwarf Erfurt | .50 | 6.00 |
| Large Early Erfurt | .10 | 2.25 |
| Early Snowball | .25 | 2.50 |
| Gilt Edge | .25 | 2.50 |
| Large Algiers | .10 | .70 |

CARROT

| | Per oz. | ¼ lb. |
|------------------------|---------|--------|
| Early Forcing | \$0.20 | \$0.75 |
| Half-Long Nantes | .15 | .50 |
| Long Orange | .15 | .50 |

CUCUMBER. For Forcing

| | Per pkt. |
|---------------------------|----------|
| Telegraph | \$0.25 |
| Lockie's Perfection | .25 |
| Matchless | .25 |
| Duke of Edinburg | .25 |

ENDIVE

| | Per oz. | ¼ lb. |
|--------------------------------|---------|--------|
| Green-curved Winter | \$0.15 | \$0.40 |
| Broad-leaved (Escarolle) | .15 | .40 |

KALE or BORECOLE

| | Per oz. | ¼ lb. |
|---------------------------------|---------|--------|
| Curled Siberian | \$0.10 | \$0.25 |
| Dwarf Green Curled Scotch | .10 | .30 |
| Tall Green Curled Scotch | .10 | .30 |

LETTUCE

| | Per oz. | ¼ lb. |
|---------------------|---------|--------|
| Boston Market | \$0.20 | \$0.50 |
| Glass House | .20 | .50 |
| Golden Queen | .20 | .50 |
| May King | .20 | .50 |
| Tennis Ball | .20 | .50 |
| Way Ahead | .40 | 1.00 |
| Grand Rapids | .20 | .50 |

MELONS. For Forcing.

| | Per pkt. |
|--------------------------|----------|
| Blenheim Orange | \$0.25 |
| Emerald Gem | .25 |
| Invincible Scarlet | .25 |
| Royal Jubilee | .25 |
| Royal Sovereign | .25 |

ONION

| | Per oz. | ¼ lb. |
|-------------------|---------|--------|
| White Welsh | \$0.20 | \$0.60 |
| White Globe | .35 | 1.00 |
| Prizetaker | .25 | .75 |
| Red Globe | .25 | .75 |

PEAS

| | Per pt. | Qt. |
|---------------------------|---------|--------|
| Alaska | \$0.20 | \$0.40 |
| Extra-Early Market | .20 | .40 |
| Notts Excelisor | .25 | .50 |
| Champion of England | .25 | .45 |
| Telegraph | .20 | .40 |
| Telephone | .25 | .50 |

PARSLEY

| | Per oz. | ¼ lb. |
|------------------------|---------|--------|
| Moss Curled | \$0.10 | \$0.25 |
| Dwarf Perfection | .35 | 1.00 |

RADISH

| | Per oz. | ¼ lb. |
|--|---------|--------|
| Turnip Early Scarlet | \$0.10 | \$0.30 |
| Turnip Early Scarlet White-tipped Forcing | .10 | .40 |
| Turnip Early Scarlet Globe shaped | .10 | .35 |
| Turnip Early Crimson Giant | .10 | .35 |
| Turnip Early Perfection | .15 | .40 |
| Olive-shaped French Breakfast | .10 | .35 |
| Olive-shaped Forcing | .10 | .35 |
| Round Scarlet China | .10 | .25 |
| Winter Scarlet Chinese | .10 | .35 |
| Winter Long Black Spanish | .10 | .25 |
| Winter Oval Black Spanish | .10 | .25 |

SPINACH

| | Per oz. | ¼ lb. | Lb. |
|--|---------|--------|--------|
| Round Viroflay (Thick-leaved) | \$0.10 | \$0.15 | \$0.35 |
| Curled-leaved Savoy, or Bloomsdale | .10 | .15 | .40 |
| Long-standing (Round thick- leaved) | .10 | .15 | .35 |
| Victoria | .10 | .15 | .40 |
| Prickly | .10 | .15 | .30 |

TOMATO. For Forcing Under Glass

| | Per pkt. |
|---------------------------|----------|
| The Marshall | \$0.25 |
| Marshall's Prolific | .25 |
| Stirling Castle | .10 |
| Comet | .15 |
| Lorillard | .10 |

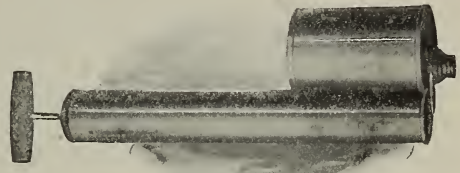
TURNIP

| | Per oz. | ¼ lb. |
|-------------------------------------|---------|--------|
| Purple-top Milan | \$0.10 | \$0.25 |
| White Milan | .10 | .30 |
| Red-top Strap-leaf | .10 | .20 |
| White Strap-leaf Flat | .10 | .20 |
| Yellow Stone | .10 | .20 |
| Rutabaga, Purple-top Improved | .10 | .20 |

THE AUTO-SPRAY No. 37.

Continuous Sprayer. Compact design. Will handle all solutions, insecticides and disinfectants. The entire front may be removed, permitting the syphon tube to be withdrawn should it become clogged. Brass ball valves. Two spray caps, one straight, and the other at an angle for reaching the under side of broad leaves. Will spray with tank at any angle. Solution does not come in contact with pump cylinder.

Auto-Spray No. 37-B. Galv. reservoir..... \$1.00
Auto-Spray No. 37-C. Brass reservoir..... 1.25

THE AUTO-SPRAY No. 21.

Tin Sprayer. Capacity about 1 quart. Made from heavy material. Copper syphon tube. Pump cylinder extra large 2-inch diameter.

Net Cash Price.

Auto-Spray. No. 21-A. All tin \$0.50
Auto-Spray No. 21-B. Brass reservoir75

AUTO-SPRAY PUMP.

No other style of sprayer will do such a variety work, and do it so well. We recommend it for trees, shrubs, and vines, greenhouses, poultry houses, hospitals, and stables for disinfectants, for sheep and cattle dip and cattle fly oils.

It may be used where any bucket or knapsack sprayer can be used, and with much more satisfaction. Even those who have commercial orchards and large power sprayers, need the "Auto Spray" No. 1 for small work.

| | |
|---|--------|
| No. 1 A. Brass Tank, with Stop-Cock..... | \$6.75 |
| No. 1 B. Brass Tank, with "Auto-Pop"..... | 7.25 |
| No. 1 C. Galvanized Tank, with Stop-Cock..... | 4.50 |
| No. 1 D. Galvanized Tank, with "Auto-Pop"..... | 5.00 |
| "Auto-Pop" Nozzle | 1.25 |
| Extension Pipe, Brass, 2 ft. lengths, each..... | .50 |
| Brass Strainer | 1.00 |

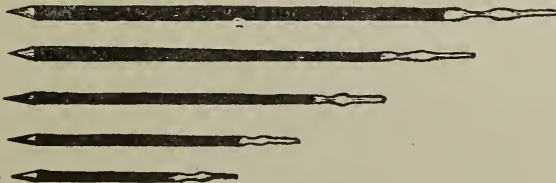
MATS, FROST-PROOF, BURLAP.

These mats are 76 x 76 inches square, and made of strong Burlap Cloth, filled with wool.

Each, \$1.50; per dozen, \$16.00.

**WATERPROOF DUCK.**

Filled same as above, with waterproof duck cotton cloth on one side. Size, 76 x 76 inches. Each, \$2.00; per dozen, \$22.00.

**DAHLIA STAKES, or POLES.**

Heavy; round green; tops painted white.

| | | | | | |
|--------------|---------|-------|---------|-----|--------|
| 2 feet, each | \$0.06, | dozen | \$0.60, | 100 | \$4.50 |
| 3 feet, each | .08, | dozen | .90, | 100 | 6.50 |
| 4 feet, each | .10, | dozen | 1.10, | 100 | 8.50 |
| 5 feet, each | .12, | dozen | 1.35, | 100 | 10.50 |
| 6 feet, each | .16, | dozen | 1.65, | 100 | 12.50 |

| | | | | | |
|---------------|---------------------------|---------|---------|------|---------|
| Bamboo Canes. | Natural, 6 to 8 feet..... | per 100 | \$1.25; | 1000 | \$10.00 |
| | Japanese, 8 feet | per 100 | 2.00; | 1000 | 15.00 |
| | Japanese, 10 feet | per 100 | 2.00, | 1000 | 25.00 |
| | Dyed Green, 2½ feet..... | per 100 | .60, | 1000 | 5.00 |
| | Dyed Green, 4 feet..... | per 100 | 1.00, | 1000 | 7.50 |
| | Dyed Green, 5 feet..... | per 100 | 1.15; | 1000 | 9.00 |

INSECTICIDES

APHINE. This liquid insecticide will kill plant lice of every species. Gill, 25c.; $\frac{1}{2}$ pt., 40c.; Pt, 65c.; qt., \$1.00; gal., \$2.50.

ANT DESTROYER. A non-poisonous powder. Will destroy or drive away black ants. Pkg., 10c.; $\frac{1}{2}$ lb. can, 40c.; 1 lb. can, 75c.

APHIS PUNK. The most convenient way of applying an insecticide ever yet devised. 60c. per box of 12 rolls; case of 12 boxes, \$7.00.

ARSENATE OF LEAD. For spraying all kinds of trees. Kills the Rose bugs and Elm beetle. Dilute 1 lb. to 20 gals. water. Per lb., 25c.; 5 lbs., \$1.00; 25 lbs., \$3.75.

BORDEAUX MIXTURE. A reliable remedy for the prevention of fungus and fungoid diseases. Liquid, qt., 35c.; gal., \$1.10; 5 gals., \$5.00. Dry form, 1 lb. box, 20c.

BUG DEATH. Is extensively used for cabbage and tomato worms, potato and cucumber bugs. 1 lb., 15c.; 3 lb., 35c.; 5 lb., 50c.; 12 $\frac{1}{2}$ lb., \$1.00; 100 lb. \$7.75.

CATTLE COMFORT. Protects cattle, dogs, etc., from flies and other insects. Qt., 45c.; gal., \$1.25.

COPPER SOLUTION. For Mildew, Pear and Apple Scab, rust on Carnations and Violets. Gal., \$1.50.

CUT WORM FOOD. For destroying cut worms. 1 lb. pkg., 25c.; 5 lbs., \$1.00.

FIR TREE OIL. For greenhouse and house plants. It destroys all plant insects without injuring the plants. Pt., 75c.; qt., \$1.40; $\frac{1}{2}$ gal., \$2.50; 1 gal., \$4.50.

FIR TREE OIL SOAP. Useful on greenhouse and garden plants, killing red spiders, mealy bugs, aphids, etc. $\frac{1}{2}$ lb. tin, 25c.; 2 lbs., 75c.

FORMALDEHYDE. A useful fungicide for Potato Scab, Rosette in Lettuce, Onion Smut and fungus in soils. Per lb., 35c.

FUNGINE. An infallible remedy for mildew and other fungus diseases. Pt., 50c.; qt., 75c.; gal., \$2.00.

GISHURST COMPOUND. An English preparation for greenfly, scale, mealy bug, red spider, etc. 1 lb. box, 50c.

GRAPE DUST. For the prevention of mildew on roses, grapes, gooseberries, etc. 5 lb. pkg., 35c.; 100 lb. keg, \$6.00.

HELLEBORE POWDER. For rose slugs, currant worms, etc. Dust on with gun or bellows while the foliage is moist. $\frac{1}{4}$ lb., 10c.; $\frac{1}{2}$ lb., 15c.; 1 lb. 25c.; 5 lbs., \$1.20.

KEROSENE EMULSION. The best insecticide for general use on all plants, indoors or out. Qt., 30c.; gal., \$1.00; 5 gals., \$3.50.

LEMON OIL. For destroying mealy bugs, scale, thrip, red spider, etc. 1 pt., 40c.; qt., 75c.; $\frac{1}{2}$ gal., \$1.25; 1 gal., \$2.25.

LIME SULPHUR SOLUTION. For spraying fruit trees. Gal., 60c.; 5 gals., \$2.25.

NICO FUME LIQUID. For spraying or fumigating. Does not stain or injure the blooms, and no disagreeable odor. $\frac{1}{4}$ pt., 50c.; 1 pt.; \$1.50; $\frac{1}{2}$ gal., \$5.50; 1 gal., \$10.50.

NICO FUME PAPER. Extra strong tobacco paper for burning. 24 sheets, 75c.; 144 sheets, \$3.50; 288 sheets, \$6.50.

NIKOTIANA. For spraying and fumigating. qt., \$1.25; gal., \$4.00.

NIKOTEBEN. A thorough exterminator of mealy bug, thrip, lice and insects affecting plant life. $\frac{1}{4}$ pt., 40c.; 1 pt. \$1.50.

NICOTICIDE. Fumigating compound. A certain destroyer of all greenhouse bugs. One pint sufficient for 32,000 cubic feet. \$2.50 each. Fumigating Lamps for above. 60c. each.

PARIS GREEN. For potato bugs, etc. $\frac{1}{4}$ lb., 10c.; $\frac{1}{2}$ lb., 15c.; 1 lb. 30c.

SCALECIDE. For San Jose scale and spraying all kinds of trees. Can be prepared in an instant by adding one gallon of Scalecide to 15 or 20 gallons of water. 1 gal. can, \$1.00; 5 gals., \$4.00; 10 gals., \$7.50; 50 gals., \$25.00.

SCALINE. A scalecide, insecticide and fungicide combined. Qt., 75c.; gal., \$1.50; 5 gals., \$6.25; 10 gals., \$10.00; bbl. (50 gals.), \$37.50.

SLUG SHOT. Destroys all insects injurious to house and garden plants, vegetables and fruits of all kinds. 1 lb. cartons, 15c.; 5 lb. pkg., 30c.; 10 lbs., 60c.; keg of 125 lbs., \$7.50.

SULPHO-TOBACCO SOAP. Non-injurious to plant life, exterminates moths, cockroaches, etc. 3 oz. cake, 10c.; 8 oz. cake, 20c.

SULPHUR, Powdered. A staple preventive for mildew on grapes, roses, etc. Lb., 10c.; 10 lbs., 60c.; 25 lbs., and over, 5c. per lb.

TOBACCO DUST. "Tip Top Brand" destroys rose lice, cabbage and turnip fleas, etc. Lb., 10c.; 5 lbs., 35c.; 10 lbs., 60c.; 100 lbs., \$4.00.

TOBACCO DUST FUMIGATING. "Tip Top Brand" used for burning in place of stems. 10 lbs., 60c.; 50 lbs., \$2.00; 100 lbs., \$4.00.

TOBACCO STEMS FOR FUMIGATING. Clean and free from rubbish. In bales of 100 lbs., \$1.75 each; 300 lbs., \$4.50.

VERMINE. For all soil vermine. $\frac{1}{2}$ pt., 40c.; 1 pt., 65c.; qt., \$1.00; 1 gal., \$3.00.

WHALE-OIL SOAP. Kills insects and eggs on trees and plants. 1 lb., 15c.; 3 lbs., 40c.

WILSON'S PLANT OIL. For killing scales on palms and other plants. Gal., \$2.00.

WORM ERADICATOR. "Radix" for destroying worms in flower pots, lawns, tennis courts, etc. Dry form, 1 lb. box, 50c.

X. L. ALL LIQUID INSECTICIDE. For spraying. Harmless to very delicate plants; kills all insect pests. Qt., \$1.00; $\frac{1}{2}$ gal., \$1.75; 1 gal., \$3.50.

MAILING CARD

PLACE
ONE CENT
STAMP
HERE

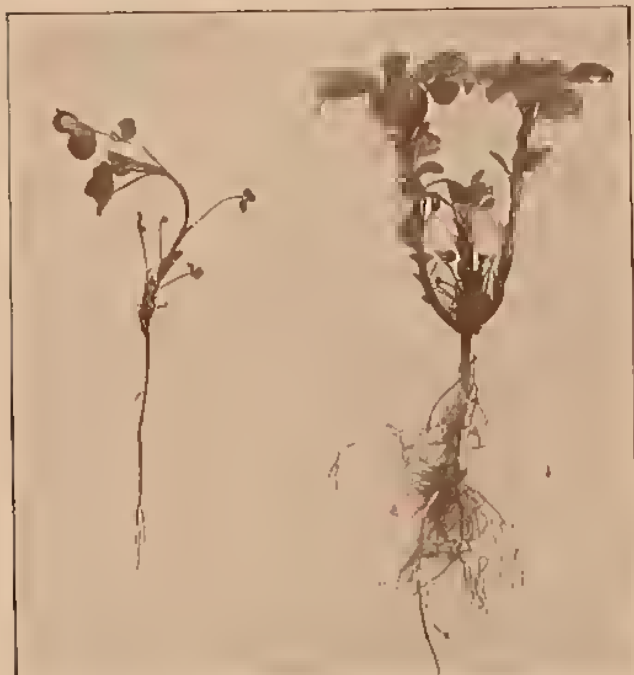


THE MULFORD BIOLOGICAL LABORATORIES

Largest in the world, extending over an area of more than 200 acres, where THE MULFORD NITRO-GERM, Mulford Antitoxins, Serums, Tuberculins, Bacterins and Vaccines are prepared and tested.

Grow Bigger and Better Crops
by using

The Mulford Nitro-Germ



Uninoculated ALFALFA Inoculated

Planted September, 1912—Photographed same scale April, 1913. Plant on left not inoculated—Plant on right inoculated with The Mulford Nitro-Germ. All other conditions identical. THE CONTRAST SPEAKS FOR ITSELF.

What The Mulford Nitro-Germ Will Do

If properly used and soil conditions being favorable, The Mulford Nitro-Germ will

Increase the development and yield of legumes

Induce a prompt growth or "catch"

Improve the soil

Help succeeding crops of any kind

How The Mulford Nitro-Germ is Used

The Mulford Nitro-Germ is very easy to use, no special knowledge, no previous experience and no special implements being required. It is only necessary to add water to the bottle (which is intentionally only about one-fourth filled), shake well, and then dampen with this mixture the seeds or soil, which will not interfere with planting.

What The Mulford Nitro-Germ Is

The Mulford Nitro-Germ consists of a growth of pure cultures of "physiologically efficient" or active bacteria, grown on specially prepared media (a jelly-like mass) and is furnished in flint glass bottles with rubber stoppers. The media is particularly adapted to nurture the bacteria and is deficient in nitrogen compounds, so that the bacteria become "nitrogen-hungry" as it were, and therefore more likely to attack the roots of the plants.

We have demonstrated that the bacteria will remain alive and retain their vitality and vigor, to attack the rootlets of plants, in the form of sealed bottles in which The Mulford Nitro-Germ is supplied.

How Prepared and Tested

Each bottle of The Mulford Nitro-Germ is prepared separately with a strain of the bacteria freshly isolated or obtained from the variety of legume for which it is intended.

Only those bottles showing a maximum and healthy growth of the bacteria are supplied. The bottles are handled in lots and a number of bottles from each lot are held in the laboratory, and tested on seeds and growing plants at regular intervals. Each bottle is marked with a laboratory number, which refers to our records. Experience has shown that different strains of soil bacteria, even of the same species, do not behave in the same manner and do not all attack plants, to bring about the formation of nodules, with the same vigor.



Uninoculated WHITE CLOVER Inoculated

Left shows two single plants. Planted September, 1912—Photographed same scale April, 1913. Plant on left not inoculated—Plant on right inoculated with The Mulford Nitro-Germ. All other conditions identical. Does it pay to use The Mulford Nitro-Germ?

MAILING CARD

PLACE
ONE CENT
STAMP
HERE

W. E. MARSHALL & CO.

166 W. 23rd STREET

SEEDS, PLANTS, BULBS, Etc.

NEW YORK

In the preparation of The Mulford Nitro-Germ, we constantly test the bacterin on seeds and growing plants, thus enabling us to select and use strains that are vigorous in actual practice.

The Mulford Nitro-Germ is prepared and tested with the same degree of care as Mulford Diphtherin Antitoxin, Typho-Bacterin (Typhoid Vaccine), Smallpox Vaccine, Anthrax and Black-Leg Vaccines, Tuberculin, Hog Cholera Serum, etc., for which the Mulford Laboratories are so widely and favorably known.

The Mulford Standard of quality is recognized everywhere.

How Supplied

The Mulford Nitro-Germ is supplied in three convenient sizes, Garden (about 1-4 acre), One Acre and Five Acre. Full and explicit directions for use are enclosed in each package.

Legumes

The legumes are the pod-bearing plants, of which beans, peas, alfalfa, clovers, vetch, etc., are the better known. They are the only plants, as a class, that can assimilate the nitrogen of the air as a part of their food (which action is entirely due to the association of nitrogen-fixing bacteria), thereby stimulating their own growth and greatly enriching the soil in the valuable element nitrogen, when they decay. For these reasons, the legumes have recently come into greater agricultural prominence, and, as most of the varieties are of high food value, their more extensive cultivation is assured.

The legumes differ from other plants, or non-legumes, chiefly in that the legumes, when grown under suitable soil conditions, have on their roots a number of tubercles or nodules, which are caused by the activities of the nitrogen-fixing bacteria. The bacteria in these nodules have the peculiar property of fixing or assimilating nitrogen from the air and of converting it into nitrate form suitable as food for the plants.

Is Inoculation Advisable?

The reports of the U. S. Department of Agriculture and various State Agricultural Experiment Stations show that the value of legumes, both as food and as green manure crops, and the importance of inoculating them with the proper nitrogen-fixing bacteria, has been fully established.

The inoculation may be accomplished by the use of pure cultures (The Mulford Nitro-Germ) to treat either the seeds of legumes or the soil. Another method is to transport and spread soil on which the desired crop has previously grown, but this is objectionable because of the danger of introducing harmful weeds or plant diseases, and because it is usually inconvenient and expensive. It has been shown that there are different strains of the bacteria, and that one strain will more readily form nodules on the roots of one variety of legume, to which the strain is accustomed, than on another, thus explaining why most soils are not naturally suitable to the growth of these important and valuable crops.

Are All Nitrogen-Fixing Bacteria Cultures Alike?

They are not. While the reports of trials and tests by Agricultural Experiment Stations and others are favorable in a great many instances, yet they record some failures

which might challenge the value of seed and soil inoculation by the use of bacterial cultures. If the bacteria used are alive, of an active and vigorous type, of the proper strain for the legume being treated, if soil conditions are favorable and the correct method of application is followed, successful inoculation with its beneficial results can be depended upon.

In the preparation of The Mulford Nitro-Germ the specific bacteria are isolated, selected, grown and tested with scientific precision and skill and with the same care as is exercised in preparing Mulford Products for human and veterinary use.

This is why The Mulford Nitro-Germ is preferred.

Prices

The Mulford Nitro-Germ is supplied for the varieties of legumes indicated below, at the following prices:

Garden Size (about 1-4 acre) \$.50
One Acre 2.00
Five Acres 9.00
 (Not returnable)

Special prices on lots of twenty-five acres or more on one order, either of one kind or assorted.



ROOT OF ALFALFA PLANT

Seed inoculated with The Mulford Nitro-Germ and planted September, 1912. Photographed April, 1913.

NOTE ABUNDANCE OF NODULES.

Be sure to always specify the particular legume for which The Mulford Nitro-Germ is desired, otherwise we will not know how to fill your order.

| | | | |
|-------------------|-------------------|----------------|--------------|
| ALFALFA (Lucerne) | Burr Clover | SPRING VETCH | GARDEN BEANS |
| CRIMSON CLOVER | Yellow Clover | WINTER VETCH | LIMA BEANS |
| SWEET CLOVER | Berseem Clover | Horse Beans | Lupins |
| WHITE CLOVER | COW PEAS | Velvet Beans | Sainfoin |
| RED CLOVER | SOY BEANS | Perennial Peas | Beggar Weed |
| ALSIKE CLOVER | CANADA FIELD PEAS | SWEET PEAS | and others |
| Mammoth Clover | PEANUTS | GARDEN PEAS | |

Those printed in CAPITAL LETTERS can be shipped immediately from stock. The others will be prepared to order and can be supplied in a few days.

Guarantee

Each bottle of The Mulford Nitro-Germ is guaranteed to contain pure, active, vigorous cultures of nitrogen-fixing bacteria, of the proper strain as indicated on the label, and in sufficient quantities to inoculate the required amount of seed or soil for the area specified on the label.

Because of varying conditions, there is no guarantee that its use will produce crop results, and it is sold with this distinct understanding. However, if The Mulford Nitro-Germ is properly used and the soil conditions are favorable, successful inoculation and all that it implies is practically assured from the start.

Why buy expensive commercial nitrates when you can grow legume crops and thus increase the yield and at the same time replace the nitrates, enrich and renovate the soil by Nature's own method.

Inoculate All Legumes With the Mulford Nitro-Germ

Small Cost Large Returns Easy to Use

Full descriptive literature sent free upon request. Prepared and tested by

H. K. Mulford Co., Philadelphia, U. S. of A.

Pharmaceutical and Biological Chemists

Order Now on the Attached Card

1111

ORDER CARD

Date_____

Please ship me immediately the following:

| QUANTITY | | | The Mulford Nitro-Germ (Specify Variety of Legume to be inoculated) | Price | |
|----------|--------|--------|--|-------|--|
| 5 Acres | 1 Acre | Garden | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

(The Mulford Nitro-Germ is sold without return or exchange privilege)

Name_____

Street Address_____

Town_____State_____

If you have no account with us avoid delay by sending remittance with order or instruct us to ship C. O. D.

FERTILIZERS

DAVIDGE'S BONE FERTILIZER FOR LAWNS AND GARDENS.

This manure is guaranteed to contain no acid or chemicals. It will grow any horticultural or vegetable crop, and is a substitute without disagreeable features. We can highly recommend it for the garden, lawn or greenhouse.

For plants use a 7-inch pot to a large wheelbarrow of soil well mixed together. On land use 500 pounds to the acre or 50 pounds to 300 square feet of surface.

5 lbs., 25c.; 10 lbs., 40c.; 25 lbs., 75c.; 50 lbs., \$1.25; 100 lbs., \$2.00; ton, \$35.00.

BONARBOR.

This plant food has a wonderful effect on plant life. It is good for flowering plants of all kinds, vegetables, fruit and shade trees, lawns, etc. $\frac{1}{2}$ lb. pkg., 25c.; 1 lb. pkg., 40c.; 5 lb. pkg., \$1.75.

BONE DUST, Pure Bone Dust.

This bone is made from the best quality of bone and finely pulverized. It is absolutely pure and contains every ingredient without extraction. Price, 50 lbs., \$1.75; 100 lbs., \$3.00; 200 lbs., \$5.50; ton, \$45.00.

BONE, CRUSHED.

A coarse grade, well adapted for grape vine borders. Price, 100 lbs., \$3.50; ton, \$60.00.

CLAY'S FERTILIZER.

This is one of the best manures for all horticultural purposes, either in greenhouse or garden. It is productive and lasting. 28 lbs., \$2.25; 56 lb. bag, \$4.00; 112 lb. bag, \$7.00.

NITRATE OF SODA.

It is valuable for grain, corn, beets, potatoes, grasses, peas, beans, clover, etc. Being extremely soluble, it should not be applied until the plants are above ground, using 100 to 500 pounds per acre. 5 lbs., 35c.; 10 lbs., 60c.; 50 lbs., \$3.00; 100 lbs., \$5.00.

PULVERIZED SHEEP MANURE.

A rich, pure and natural manure. Excellent as a top dressing for lawns, and mixing with the soil for greenhouse plants—one part manure and six parts soil. 5 lb. pkg., 25c.; 10 lbs., 50c.; 50 lbs., \$1.25; 100 lbs., \$2.00; ton, \$35.00.

THOMPSON'S CHRYSANTHEMUM MANURE.

A special top dressing of unusual merit. 28 lbs., \$4.50; 56 lbs., \$7.50; 112 lbs., \$14.00.

THOMPSON'S VINE AND PLANT MANURE.

A well-known English fertilizer. 56 lbs., \$4.00; 112 lbs., \$7.00.

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FALL
CATALOGUE
OF
BULBS

W. E. Marshall & Co.
166 W. 23rd St., New York